Wizard-512 DMX-Software

CE

Wizard-512

Version 4.11

Einleitung

Dieses Programm wurde zur Steuerung von Diskothekenbeleuchtungssystemen entwickelt. Die Hauptvorteile liegen in der hohen Anwenderfreundlichkeit und die schnelle Steuerung verschiedenster Lichteffekte über die aktualisierbare Scannerbibliothek. Das Programm bietet eine bedienerfreundliche Oberfläche mit spezifischen Icons für jede Funktion (Farbe, Gobo) oder Pan/Tilt-Feldern für die Spiegelbewegungen (die sich jedoch auch mit konventionellen Fadern steuern lassen). Die Daten werden über das über den Druckeranschluß verbundene DMX-Interface an die Projektoren ausgegeben.

Hauptfeatures:

1. Mit dem Programm lassen sich alle DMX-gesteuerten Projektoren ansteuern.
2. Es lassen sich beliebig viele Projektoren in der DMX-512 Kette ansteuern.
3. Eine SHOW besteht aus bis zu 256 SEQUENZEN, SEQUENZ - 16384 SCENES. Es lassen sich beliebig viele SHOWS erstellen.
4. Jeder Projektortyp kann seine eigene Oberfläche (control panel) bekommen, auch mit Farb- und Gobo-Icons.
5. Traditionelle Programmierungsoptionen - Pan/Tilt-Swap und -Reverse, multi-Sequenz-Modus, etc.
6. Die Musiksteuerung kann sowohl intern wie extern erfolgen. Möglichkeit der MIDI-Steuerung, Sequenzer-Software, etc.
7. Manuelle Ansteuerung jedes Projektors jederzeit möglich.
8. Extrem schnelles Hinzufügen eines neuen Projektors zur vorher erstellten SHOW über die Kopier- und Editierfunktion.
9. Erweiterbare Scannerbibliothek über integriertes Design-Modul (Panel Designer)
10. Für Windows 95/98 mit einer Bildschirmauflösung von 800x600 Pixel oder höher.

INHALT:

LIEFERUMFANG

Das Softwarepaket Wizard-512 umfasst

- 1 Druckeranschlussleitung
- 1 DMX-Interface
- 1 CD-Rom
- 1 Bedienungsanleitung
- 1 Netzteil

ANSCHLUSS DER HARDWARE

Schließen Sie die Druckeranschlussleitung an die parallele Schnittstelle Ihres PCs und an das Interface an.

SPANNUNGSVERSORGUNG

Schließen Sie das Interface über das beiliegende Netzteil an das Spannungsnetz an.

ANSCHLUSS DER PROJEKTOREN

Schließen Sie den ersten Projektor über die DMX-Eingangsbuchse an das Interface an. Verbinden sie weitere Projektoren über die DMX-Ausgangsbuchse miteinander.

MUSIKSTEUERUNG

Die Musiksteuerung geht entweder über das eingebaute Mikrofon im Interface oder über Ihr externes Audiomischpult. Sobald Sie die 6,3 mm Mono-Klinkenbuchse mit dem Mischpult verbinden, wird das interne Mikrofon deaktiviert.

INSTALLATION DER SOFTWARE

Speichern Sie die auf der CD-Rom enthaltenen Dateien auf Ihrer Festplatte in einem neuen Ordner ab. Die Installationsdateien sind mit dem Komprimierungsprogramm Winzip gepackt. Falls Sie dieses Programm noch nicht auf Ihrem PC installiert haben, können Sie es im Internet unter www.winzip.com downloaden. Installieren Sie das Programm. Entpacken Sie die *.zip Datei in Ihr aktuelles Verzeichnis.
Starten Sie das Programm Setup.
Folgen Sie den Bildschirmanweisungen.
Sobald die Installation abgeschlossen ist, sollten Sie Ihren Rechner neu starten.

PROGRAMMSTART

Starten Sie das Programm über die Startleiste oder vom Desktop aus. Wenn das Interface nicht angeschlossen worden ist, erscheint eine Fehlermeldung, die darauf hinweist, daß Sie das Programm dann nur im Demo-Modus betreiben können. Dabei sind jedoch auch sämtliche Funktionen verfügbar und die vorgenommenen Einstellungen können auch abgespeichert werden.
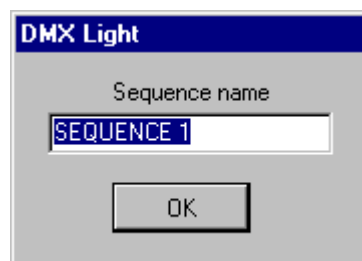
SHOW-PROGRAMMIERUNG

ANFANG

Achtung! Wenn nach dem Programmstart die Fehlermeldung «DMX device is inaccessible» ("Kein DMX-Interface") erscheint, lesen Sie bitte unter "Treiberinstallation des DMX-Interface".

Nach dem Programmstart erscheint folgender Ablauf:

Um eine SHOW zu programmieren, drücken Sie , und Sie werden aufgefordert, den DMX-Patch zu konfigurieren (bitte beachten Sie die Hinweise unter "DMX-Kanäle"). Hier können Sie die zu programmierenden Projektoren hinzufügen oder entfernen und Sie werden aufgefordert, die erste SEQUENZ zu betiteln:

Wenn Sie eine vorher bereits programmierte SHOW aufrufen möchten, drücken Sie und der Standardablauf zum Aufrufen einer Datei erscheint.
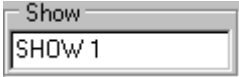
So können Sie die SHOW programmieren oder verändern. Wenn Sie jedoch ab Einrichten von Control Panels starten möchten folgen Sie den unten beschriebenen Schritten.

Mit der Taste öffnen Sie den «Control Panel Designer». Bitte beachten Sie die Hinweise weiter unten in dieser Anleitung.

SHOW-STRUKTUR

1. Eine SHOW besteht aus einer Reihe von SEQUENZEN.

   Der Name der SHOW kann im SHOW-Fenster [SHOW 1] geändert werden. Zwischen dem Namen der Show und dem Dateinamen der Show gibt es keine Verknüpfung. Bitte benutzen Sie im SHOW-Fenster keine Tastenkombination, die sie für die Programmierung verwenden.

2. Die Programmierung einer neuen SEQUENZ starten Sie durch Drücken der [NEW SEQUENCE] Taste. Der Name der SEQUENZ wird beim Erstellen definiert oder jederzeit während die SHOW editiert wird, indem Sie «Sequences List» aus dem Auswahlmenü unter Settings oder über F7 auswählen. Bitte benutzen Sie keine Tastenkombination, die sie für die Programmierung verwenden. Klicken Sie mit der rechten Maustaste und wählen Sie aus dem Kontextmenü [Sequences TEST] "Rename Sequence"

   Um eine nicht benötigte SEQUENZ zu entfernen, drücken Sie die [Delete] Taste in der Auswahl SEQUENCES:

   Die Anzeige << **1** >> bedeutet die Indexnummer der SEQUENCE in einer SHOW.

3. Die SEQUENZ besteht aus einer Anzahl SZENEN. Die Programmierung einer neuen SZENE wird über die [NEW SCENE] Taste gestartet. Der Name der SZENE kann jederzeit geändert werden. Durch Drücken der [Delete] Taste in der Auswahl SCENE können Sie eine nicht benötigte SZENE löschen.

   Unter einer SZENE versteht man das Gesamtbild der angeschlossenen Projektoren zu einem bestimmten Zeitpunkt.

4. Wenn die SEQUENZ mehr als eine SZENE enthält, können Sie sich während dem Editieren von SZENE zu SZENE bewegen, indem Sie die [← →] Tasten drücken.

ERSTELLEN EINER SEQUENZ

Die bequemste Art, eine SEQUENZ zu erstellen, wird im Folgenden beschrieben:

   a) Drücken Sie die [NEW SEQUENCE] Taste. Erstellen Sie die erste SZENE, indem Sie alle Projektoren in die gewünschten Positionen bringen und die für diese Szene gewünschten Einstellungen vornehmen.
   b) Drücken Sie die «NEW SCENE» Taste. Dadurch übernimmt die folgende SZENE die Attribute der vorhergehenden Szene. Wählen Sie die gewünschten Projektoren, Positionen (wenn Sie die Strahlenposition verändern können Sie durch Halten der CTRL-Taste die horizontale und durch Halten der SHIFT-Taste die vertikale Bewegung einfrieren) und Einstellungen aus. Die Einstellungen einer SZENE lassen sich durch Drücken der «NEW SCENE» Taste oder der

 Tasten abspeichern. Die Befehle Next und Previous lassen sich auch aus dem Szenen-Menü oder über die Tastenkombinationen Ctrl+A und Ctrl+Q aufrufen.

c) Eine SEQUENZ wird erstellt und erweitert, indem Sie die «NEW SCENE» Taste drücken und die Projektorenauswahl und die gewünschten Einstellungen abspeichern. Wenn dies notwendig ist, können Sie eine ganze Anzahl indentischer Szenen neu erstellen, indem Sie auf die Taste drücken und dann die benötigte Anzahl der SZENEN in diesem Fenster

eingeben.

1. Jede SEQUENZ läßt sich auf die Festplatte und/oder Diskette abspeichern und aufrufen, indem Sie im Edit-Feld mit dem Namen der entsprechenden SEQUENZ die rechte Maustaste drücken.
2. Jede SZENE läßt sich auf die Festplatte und/oder Diskette abspeichern und aufrufen, indem Sie im Edit-Feld mit dem Namen der entsprechenden SZENE die rechte Maustaste drücken.

WIEDERGABE VON SEQUENZEN UND SHOW

Wenn Sie Ihre aktuelle Show testen möchten, können Sie die aktuelle Sequenz durch Drücken der

-Taste im Menü abspielen. Zum Stoppen der Wiedergabe drücken Sie die

. Die Hot Keay für beide Befehle ist F12 oder benutzerdefiniert, dabei sollte jedoch der Befehl Play und Stop die gleiche Kombination erhalten. Wie Sie während der Wiedergabe feststellen können, ändert sich das Control Panel des gewählten Gerätes (Strahlenbewegung, markierte Tasten, rotierende Regler etc.). Dies geschieht genauso wenn Sie die Szenen manuell ändern während sich das Program im Editiermodus befindet. Außerdem ist es möglich, eine Sequenz physisch abzuspielen während eine beliebige Sequenz online geändert wird. Dazu wählen Sie aus dem Kontextmenü der Play-Taste die Option „Play Current Sequence in Background" aus. Während der Hintergrundwiedergabe (background playing) der SEQUENZ (angewählte Sequenz beim Start der Hintergrundwiedergabe), haben alle Geräte die gleichen Funktionen wie bei der gewöhnlichen Wiedergabe.

Links von der Play-Taste befindet sich die „Cycle Sequence" Taste . Wird diese Taste gedrückt, beginnt die Wiedergabe nach der letzten Szene wieder am Anfang, bis die Taste erneut gedrückt wird.
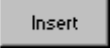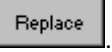
Die „External Synch" Taste dient zum Schalten in den Synchro-Modus. Bei gelber Hinterlegung erfolgt die Synchronisation über die externe Musikquelle. Die Parameter der externen Synchronisation können wie unter Synchronization, MIDI and Hardware beschrieben verändert werden.

Bei blauer Hinterlegung erfolgt die Synchronisation über den tempo track. Bei grüner Hinterlegung wird die Szenenschaltung über einen internen Beat-Generator geschaltet, dessen Frequenz sich im Frequenz-Fenster einstellen läßt. Die Frequenz in BPM läßt sich auch manuell einstellen, indem Sie auf die „Manual Tempo Correction" Taste tippen.

Bitte beachten Sie auch die Hinweise unter „Multi-Sequence Player".

KOPIEREN VON SZENEN

Die Taste kopiert eine SZENE in die Zwischenablage und durch Klicken auf das SCENES Menü erscheinen die Tasten und . Die kopierte S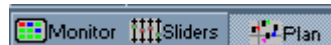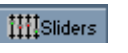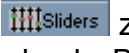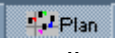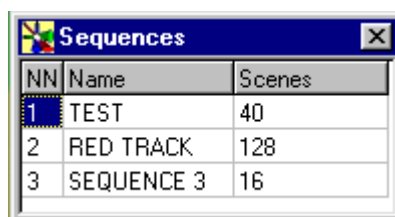ZENE kann überall innerhalb einer SEQUENZ eingefügt werden, indem Sie die «Insert» Taste drücken oder eine Szene überschreiben, indem Sie die «Replace» Taste drücken.

MONITOR, FADER, PLAN

Im oberen linken Eck des Haupmenüs können Sie 3 Modi auswählen: , und . zeigt die Kanäle des Projektors in digitaler Dezimaldarstellung sowie die benutzerdefinierten Feldüberschriften. zeigt die Kanäle des Projektors in digitaler Faderdarstellung (die Werte können durch Bewegen des Faders verändert werden). zeigt die Projektoren als Icons mit den benutzerdefinierten Überschriften; diese Icons lassen sich mit der Maus an die gewünschte Position ziehen. (Die Option «Lock icons» im Auswahlfenster «Setting» muß ausgeschaltet sein). Die Oberfläche des Plan-Fensters kann mit jedem Grafikeditor (wie z. B. Microsoft Paint) erstellt und im 16 oder 256 Farbmodus abgespeichert werden. Sie können die Oberfläche des Plan-Fensters ersetzen, indem Sie in dem Auswahlfenster «Setting» die Funktion «Change plan image» auswählen.

LISTE DER SEQUENZEN

Die Liste der Sequenzen ermöglicht eine schnelle Auswahl der benötigten Sequenz während eines SHOW-Ablaufs und im Editiermodus. Die Sequenzenliste läßt sich über das Settings-Menü oder über eine Tastenkombination aufrufen (Vorgabe F7). Ein erneutes Drücken der F7-Taste schließt das Menü wieder.

Sie können auch die zusätzliche Auswahl verwenden, Taste .

Die Reihenfolge der aufgeführten Sequenzen läßt sich durch Drag&Drop beliebig verändern.

Außerdem können Sie die Belegung der Short Cuts ändern. Dazu ist es notwendig, die entsprechende Sequenz auszuwählen und über die rechte Maustaste aus dem Auswahlfenster den gewünschten Short Cut (zwischen Alt + 1 bis Alt + 0) auszuwählen. Die Belegung der Short Cuts wird in einer SHOW-Datei abgespeichert und beim Öffnen der Datei auch wieder geladen.

In der Liste der Sequenzen können Sie des weiteren die Anordnung der Sequenzen durch Drag and Drop ändern.

Wenn Sie die Sequence List bedienen währende der Multi-sequence Player geöffnet ist, werden Sie feststellen, dass die Sequence List zur Multi-sequence Map wird. Dort können Sie die Kontrollkästchen aktivieren, um damit festzulegen, welche Sequenz in welchem Player abläuft. Wenn Sie den Multi-sequence Player schließen wird die Multi-Sequence Map wieder zur Sequence List.

AUSWAHL EINES PROJEKTORS UND EINGABE VON TEXT

Wählen Sie im Fenster «Monitor» den gewünschten Projektor durch Klicken mit der linken Maustaste aus:
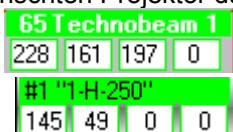
oder aus der Projekorenliste unter «Sliders»,
oder über das Icon im Fenster «Plan»:

.

Dann wird die Farbe dunkelgrün , Überschrift des gewählten Projektors weiß und auf der rechten Seite erscheint die passende Projektorvorlage.

Die Projektorattribute (Pan/Tilt bei Scannern, Farbe, Gobo, etc.) lassen sich über die Fader im Fenster «Sliders», durch manuelle Eingabe der Dezimalwerte in der Edit-Auswahl im Fenster «Monitor» oder über die Projektor-Icons. Eine Projektorvorlag könnte ungefähr so aussehen:
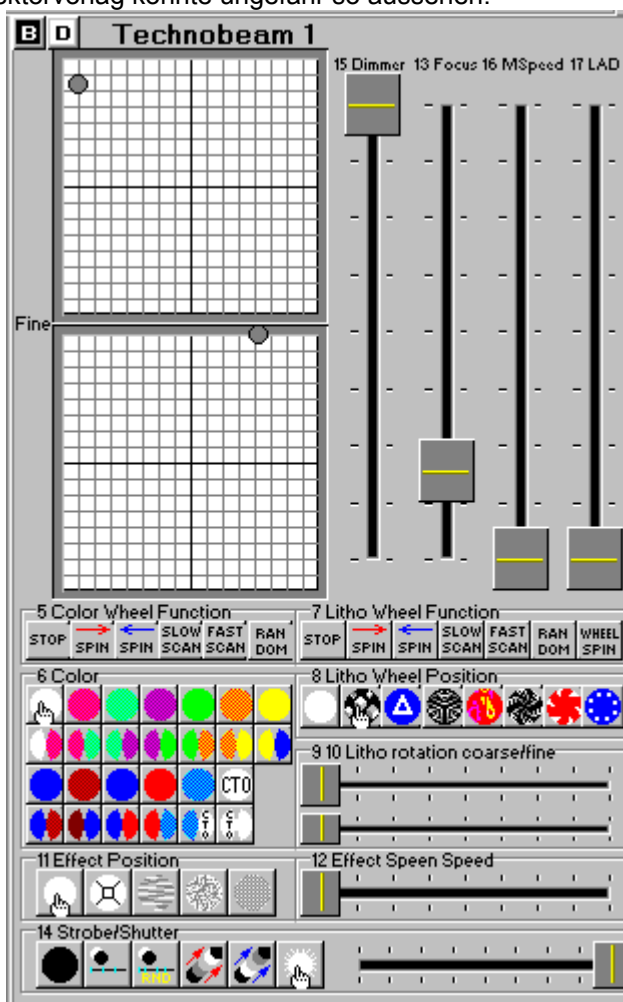
Die meisten in Diskotheken eingesetzten Projektoren belegen i. A. 4 oder mehr DMX-Kanäle. Die Projektorvorlagen lassen sich mit dem Vorlagendesigner erstellen.

Wie man Projektorvorlagen erstellt läßt sich am besten anhand der im Programm enthaltenen Vorlagen oder über die Hilfedatei des Vorlagendesigners lernen.

Im linken oberen Eck befinden sich zwei Tasten. Durch Drücken der Taste "B" geht das gewählte Gerät in den Blackout. Durch Drücken der Taste "D" geht das Gerät in die Vorgabewerte, die im Vorlagendesigner definiert wurden.

VERSCHIEDENE MÖGLICHKEITEN DER ANSTEUERUNG

Jeder Projektor kann in einem der folgenden Modi angesteuert werden:
1. NORMAL - «grün»

Dies ist der Standardmodus eines Projektors, bei dem der Projektor während der Wiedergabe die Befehle der SZENEN und SEQUENZEN ausführt und seine Attribute von SZENE zu SZENE ändert. Wird die Wiedergabe gestoppt, läßt sich der Projektor manuell ansteuern oder eine SZENE editieren.
2. LOGICAL MASTER - «rot»

Der „Logical Master" verbindet alle Projektoren mit denselben Vorlagen (control panels) in einer Mastergruppe. Dieser Modus läßt sich aufrufen, indem Sie die Ctrl-Taste halten und mit der Maustaste auf das Projektor-Icon oder seine Kopfzeile klicken. Beim ersten Mal werden dabei alle ausgewählten Projektoren auf den Modus Full Master gesetzt. Über das folgende Submenü lassen sich verschiedene „Logical Masters" auswählen:
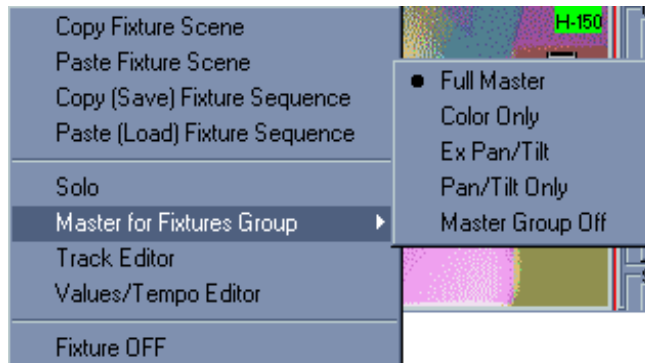
der "Master for Devices Group" im Kontextmenü des Projektor-Icons. Wenn Sie einen der „Logical Masters" aus dem Submenü auswählen, kommen alle Projektoren mit derselben Vorlage in diese Gruppe. Die ganze Gruppe läßt sich wieder auflösen, indem Sie auf Master Group Off im selben Untermenü.

Wählen Sie die Funktion Full Master des Untermenüs, wenn Sie alle möglichen Features der über ein Control Panel ausgewählten Gruppe ansteuern möchten.

Wählen Sie die Funktion Color Only des Untermenüs, wenn Sie nur die Farbkanäle der über ein Control Panel ausgewählten Features der Gruppe ansteuern möchten.

Wählen Sie die Funktion Ex Pan/Tilt des Untermenüs, wenn Sie alle Kanäle außer Pan und Tilt der über ein Control Panel ausgewählten Gruppe ansteuern möchten.

Wählen Sie die Funktion Pan/Tilt Only des Untermenüs, wenn Sie nur die Kanäle Pan und Tilt der über ein Control Panel ausgewählten Gruppe ansteuern möchten.

Alle Kanäle einer Gruppe, die so ausgewählt werden und nicht über den "Roten Master" angesteuert werden, werden in der SHOW als "Grün" angezeigt.

Einzelne Projektoren lassen sich aus der Gruppe lösen, indem Sie die Ctrl-Taste halten und mit der Maustaste auf den Projektor klicken. Wenn Sie bei gedrückter Ctrl-Taste einen Projektor mit „Logical Master" auswählen, wird der zuletzt definierte „Logical Master" ausgeführt.
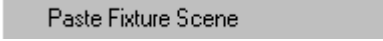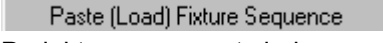
Alle "roten" Projektoren lassen sich aus der Gruppe lösen, indem Sie in dem Menü "Master Off" drücken, das nur erscheint, wenn überhaupt Projektoren im "roten Master" angesteuert werden.

Der Logical Master Modus verfügt über 2 einzigartige Features

a) Während der Wiedergabe werden die in diesem Modus ausgewählen Geräte von den folgenden SHOW-Steuerungen abgekoppelt und führen die Befehle aus der Projektorvorlage aus. Dadurch können ganze Projektorgruppen während einer SHOW manuell angesteuert werden. Es lassen sich verschiedene Arten "roter" Projektoren anlegen; diese lassen sich aber nur von einem Panel derselben Art ansteuern.

Außerdem lassen sich spezielle Attribute eines einzelnen Projektors über das Fenster «Slider» oder «Monitor» ansteuern. Die restlichen "roten" Projektoren der gleichen Art ändern ihre Parameter in diesem Fall nicht.

b) Im Editiermodus kann die Projektorvorlage einer Gruppe die Attribute der aktuellen Szene ändern. Damit läßt sich dieser Modus zum Editieren einer Gruppe einer Show verwenden. Dieser Modus läßt sich über die den Menüpunkt "Select Group for Master" aus dem Auswahlfenster "Additional operation menu" oder über die Auswahl eines Projektors bei gedrückter "Ctrl" Taste.

Obwohl der "rote" Master keine eigene Channel Map wie der "gelbe" Master hat, können Sie die "gelbe" Channel Map verwenden, um einige Kanäle aus der "roten" Mastersteuerung herausnehmen. Doppelclicken Sie dazu auf die entsprechenden roten Zellen der "gelben" Channel Map.

Außerdem ist es wichtig zu wissen, dass die Befehle ,
 , und
 des Auswahlfensters "Additional operation menu" für die "roten" Projektoren gesperrt sind.

3. MANUAL - «blau»

Dieser Modus dient nur zur manuellen Ansteuerung. Die Attribute eines Projektors lassen sich auf alle möglichen Arten verändern während der Wiedergabe und im Stop-Modus. In diesem Modus folgt der Projektor nur manuellen Befehlen.

Der MANUAL Modus läßt sich durch Drücken und Halten der Shift-Taste während der Auswahl des Projektors ein- bzw. ausschalten.

Obwohl der "blaue" Master keine eigene Channel Map wie der "gelbe" Master hat, können Sie die "gelbe" Channel Map verwenden, um einige Kanäle aus der "blauen" Mastersteuerung herausnehmen. Doppelclicken Sie dazu auf die entsprechenden blauen Zellen der "gelben" Channel Map.

4. PHYSICAL MASTER - «gelb»

Dieser Modus dient nur zur manuellen Ansteuerung bestimmter Fader. In diesem Modus können Sie die Steuerung einiger DMX-Kanäle einem Fader des Physical MASTER zuweisen. Kanäle, die dem Physical MASTER zugewiesen wurden, sind von der Show-Steuerung abgekoppelt. Es können bis zu 8 Physical MASTERS verwendet werden. Die Physical MASTER Steuerung hat einen hohen Status und läßt sich nur über das Physical MASTER Fenster ändern.
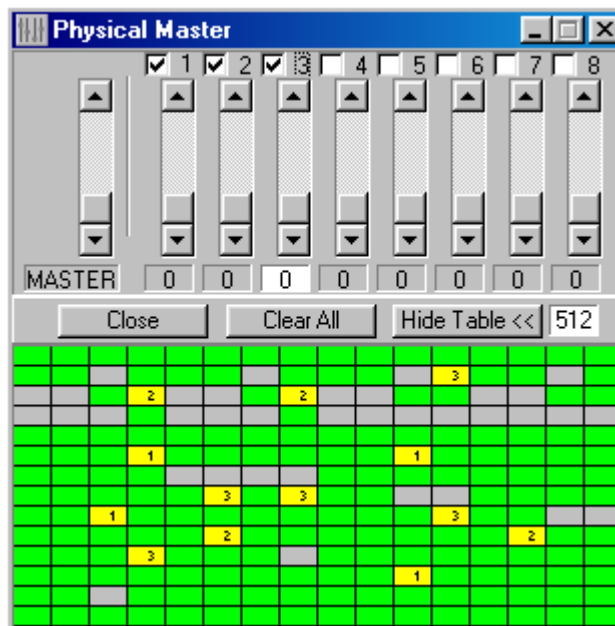
Im Physical MASTER Fenster müssen Sie die „View Table" Taste drücken, um die Konfiguration zu definieren. Darin erscheinen alle 512 Kanäle als Zellen. Die aktuelle Zellenposition der Maus wird im Kanalfenster angezeigt. Graue Zellen bedeuten freie Kanäle, belegte Kanäle werden mit farbig unterlegten Zellen angezeigt. Um die DMX-Kanäle einem der 8 Physical MASTER Fader zuzuordnen, müssen Sie die entsprechenden Fader auswählen und dann die gewünschten Zellen (Kanäle). Grüne Zellen zeigen die Kanäle an, die über die SHOW, rote Zellen die über den Logical Master und blau die über den Manual Master gesteuert werden. Die gewählten Zellen werden gelb und die Fadernummer erscheint. Der gelbe Modus hat die höchste Priorität, d. h. Sie können keinen gelben Kanal ansteuern bis Sie ihn grün gemacht haben. Doppelklicken Sie dazu erneut auf die entsprechende Zelle. Der Haupt-Masterfader läßt sich zum synchronen Bewegen aller angeklickten Fader verwenden. Wenn der Masterfader bewegt wird, lassen sich die einzelnen Fader nicht mehr anklicken oder abwählen.

Beim Programmstart sind alle Projektoren im NORMALMODUS.

MENÜ WEITERER FUNKTIONEN

Erscheinungsform:
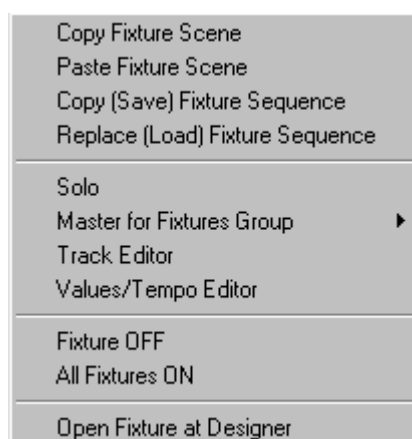
Sie gelangen zu dem Menü, indem Sie mit der rechten Maustaste in die Überschrift des gewünschten Gerätes im Fenster «Monitor» oder «Sliders» oder auf ein Icon im Fenster «Plan» klicken.
Dadurch können Sie:
1. Die Attribute eines einzelnen Gerätes in den Zwischenspeicher der aktuellen SZENE kopieren. Diese Funktion ist für die "roten" Projektoren nicht verfügbar.
2. Die kopierten Attribute eines einzelnen Gerätes in die aktuelle SZENE einfügen. Diese Funktion ist für die "roten" Projektoren nicht verfügbar.
3. Die Attribute eines einzelnen Gerätes der aktuellen SEQUENZ (d. h. alle SZENEN

einer bestimmten Auswahl an SZENEN und bis zu einer SZENE der aktuellen SEQUENZ) in den Zwischenspeicher kopieren (Diese Funktion ist für die "roten" Projektoren nicht verfügbar):
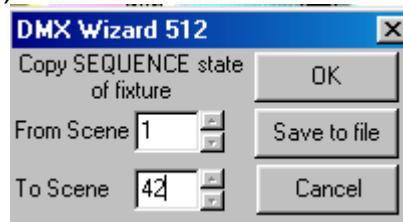
Außerdem lassen sich die Attribute der gewählten Geräte von der Sequenz in einer Datei abspeichern (drücken Sie dazu die ⬚Save to file-Taste).

Außerdem haben Sie die Möglichkeit die erste (⬚From Scene 2 Option) und die letzte (⬚To Scene 40 Option) SZENE der Serie zu bestimmen, die innerhalb der SEQUENCE kopiert wird.

4. Eine Reihe Szenen eines einzelnen Gerätes in die aktuelle Sequenz einfügen.
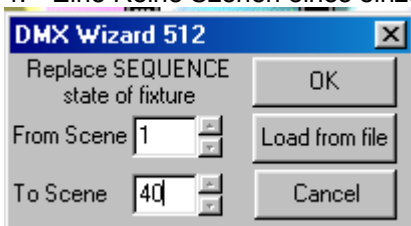
Diese Funktion ist für die "roten" Projektoren nicht verfügbar. Außerdem haben Sie die Möglichkeit die erste (⬚From Scene 2 Option) und die letzte (⬚To Scene 40 Option) SZENE der Serie zu bestimmen, die innerhalb der SEQUENCE eingefügt wird.

Über die Funktion ⬚Load from file können Sie die Szenen aus einer bereits vorhandenen Sequenz-Datei laden.
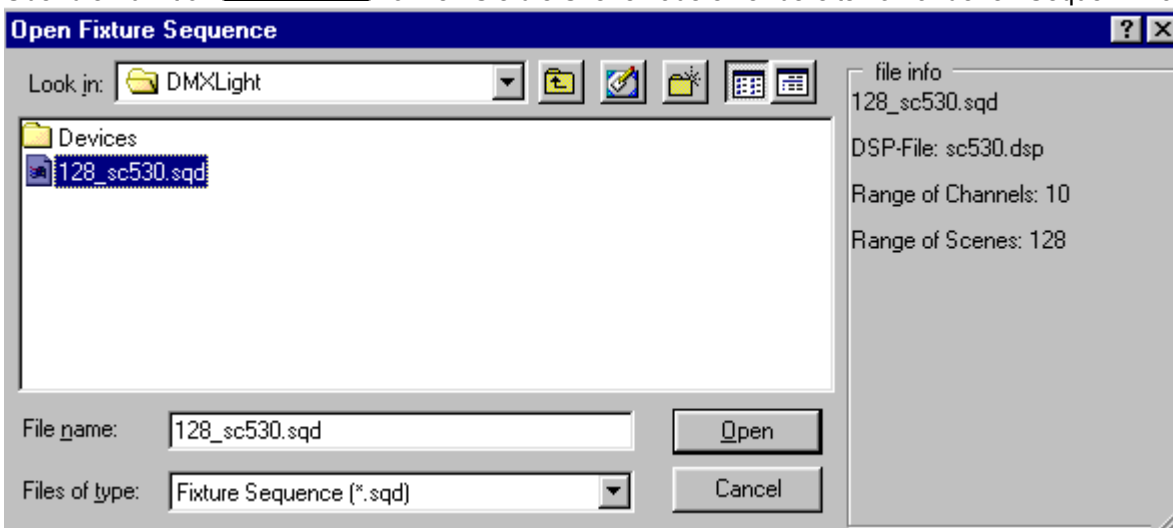
5. Das Gerät in den «Solo» Modus schalten; in diesem Fall sind alle Geräte außer dem gewählten Gerät ausgeschaltet.

6. Alle identischen Geräte über die Gerätevorlage ansteuern.
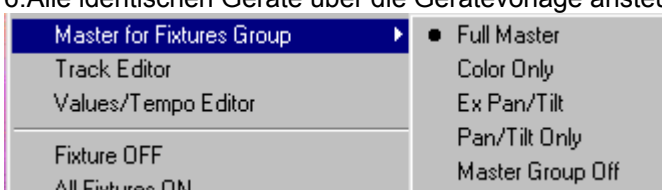
7. Den Track Editor anzeigen, wenn das Gerät über eine Pan/Tilt-Steuerung verfügt.

8. Die Werte des Values/Tempo Editors anzeigen, um die Geschwindigkeit der SEQUENZ zu verändern oder um einige Kopier-/Einfügevorgänge in der digitalen Grafikansicht auszuführen.
9. Das Gerät in den «Black Out» fahren oder aus dem Programmablauf der SHOW herausnehmen.

ZUSATZLICHES TOOLBAR

Ganz oben am Hauptfenster befindet sich das Lineal mit den Funktionstasten, über die Sie verschiedene Fenster öffnen können. Alle diese Tasten beinhalten die Funktionen des "View" Menüs.
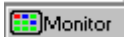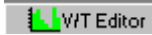
Monitor Diese Taste öffnet ein Fenster mit den Bezeichnungen der verschiedenen Geräte, ihrer Kanaleinstellungen etc.
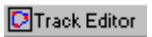
Sliders Diese Taste öffnet ein Fenster mit den Bezeichnungen der verschiedenen Geräte und einem Feld mit Fadern, über die sich die DMX-Werte einstellen lassen.

Plan Diese Taste öffnet ein Fenster mit den Icons und User names der verschiedenen Geräte.

W/T Editor Diese Taste öffnet ein Fenster das den ganzen unteren Teil des Hauptfensters ersetzt mit 2 Hauptmenü-Editoren, DMX-Wert-Editor um die DMX-Kanalwerte zu ändern und dem Tempo-Track Editor, um die Intervalle zwischen den einzelnen Szene einzustellen.

Track Editor Diese Taste öffnet ein Fenster mit Beam Track Editor, über den sich geometrische Formen als Bewegungsabläufe steuern lassen.

Diese Taste öffnet ein Fenster mit dem Media Player zur Einstellung der Media-Dateien.

Diese Taste öffnet ein Fenster mit der Wiedergabeliste, über die sich die exakten Zeiten der verschiedenen Aktionen einer Show einstellen lassen.

Diese Taste öffnet ein Fenster mit der Sequenz-Liste, über die sich die Reihenfolge der Sequenzen einstellen lässt.
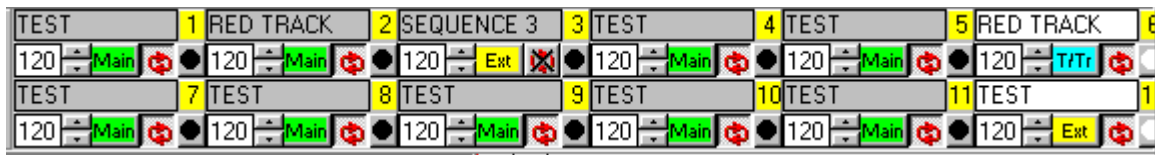
Diese Taste öffnet ein Fenster mit dem Multi Sequence Player mit 12 Playern die verschiedenen Sequenzen gleichzeitig abspielen können.

Master OFF Diese Taste ist nur sichtbar, wenn einige Master-Modi aktiv sind.

MULTI-SEQUENCE PLAYER

Wenn Sie spezielle Sequenzen mit mehreren Features Ihrer Ausstattung mischen möchten, benötigen Sie den Multi-Sequence Player. Um den Multi-Sequence Player aufzurufen, drücken Sie die ▦ Taste der zusätzlichen Leiste ♪ ▦ ▦ ▦ oder drücken Sie die Tastenkombination (Vorlage F8) oder wählen Sie Multi-Sequence Player im Menü Settings. Sobald Sie den Multi-Sequence Player starten werden alle Editierfunktionen gesperrt. Bevor Sie anfangen, mit dem Multi-Sequence Player zu arbeiten, möchten wir Ihnen einige Ratschläge geben:

1. Um den Multi-Sequence Player auszuprobieren, empfehlen wir, vorerst nur sehr simple Sequenzen zu verwenden, z. B. Farbwechsel o.ä. Bitte beachten Sie, daß alle nicht verwendeten Kanäle auf 0 gesetzt werden. Als nächstes können Sie andere Sequenzen programmieren mit allen Kanälen Ihrer Projektoren außer den Kanälen, die vorher auf 0 gesetzt wurden.
2. Steuerung von Sequenzen im Multi-Sequence Player.
Der Multi-Sequence Player enthält immer alle Sequenzen Ihrer aktuellen Show. Wenn Sie den Multi-Sequence Player zum ersten Mal öffnen nach Erstellen einer neuen Show können Sie alle programmierten Sequenzen sehen in einer der 4 Listen sehen. Bitte beachten Sie, daß nur aktive Sequenzen in einer Liste aufgeführt werden. Um eine Sequenz zu aktivieren müssen Sie auf Ihren Namen klicken und das Zahlenfeld wird dunkelblau. Wenn Sie die ▶ Taste drücken oder die Tastenkombination (Vorlage F12), werden Sie fast keinen Unterschied zwischen normaler Wiedergabe und Wiedergabe mit einer Liste an Sequenzen feststellen (bitte beachten Sie die Hinweise unter Sequence List). Um den Unterschied festzustellen, versuchen Sie Sequenzen (im Stop-Modus) von der ersten Liste in eine andere zu ziehen (dabei ist es jedoch nicht möglich, die Anordnung der Sequenzen innerhalb der Liste zu verändern). Schalten Sie dann ▧●1: wo notwendig um Listen zu aktivieren (Taste ↺☐1: ist weiß). Nun können Sie die Wiedergabe im Multi-Sequenz Mix starten.
3. Was können Sie während der Wiedergabe verändern:
Auswahl aktiver Sequenzen.
Listen On Off schalten. Dabei bedeutet off „BlackOut".
Die Option „Cycle Sequence" „↻", wobei bei ungedrückter Schaltfläche die Sequenz einmal wiedergegeben wird und an der letzten Szene stoppt.
Den „Synchro" Modus. „Main" Main, „Tempo Track" T/Tr und „External" Ext (vom Audio Beat-detector). Im „Main" synchro Modus können Sie die Taktschläge in bpm manuell eingeben.
Jede der bestehenden Masterfunktionen (bitte beachten Sie die Hinweise unter Possible master modes).
Der Multi-Sequence Player läßt sich in der Toolbar integrieren, indem Sie auf die Taste „<" klicken. Um den Multi-Sequence Player wieder aus der Toolbar zu nehmen, drücken Sie die „>" Taste.
Die „BlackOut" und „Favorite" Tasten.
4. Was können Sie im Stop-Modus ändern:
Das gleiche wie unter Wiedergabe.
Drag&Drop zwischen den Listen.
Bitte beachten Sie: Werden aktive Sequenzen im Stop-Modus verändert, verändert sich die Projektion erst mit Starten der ▶ Taste.
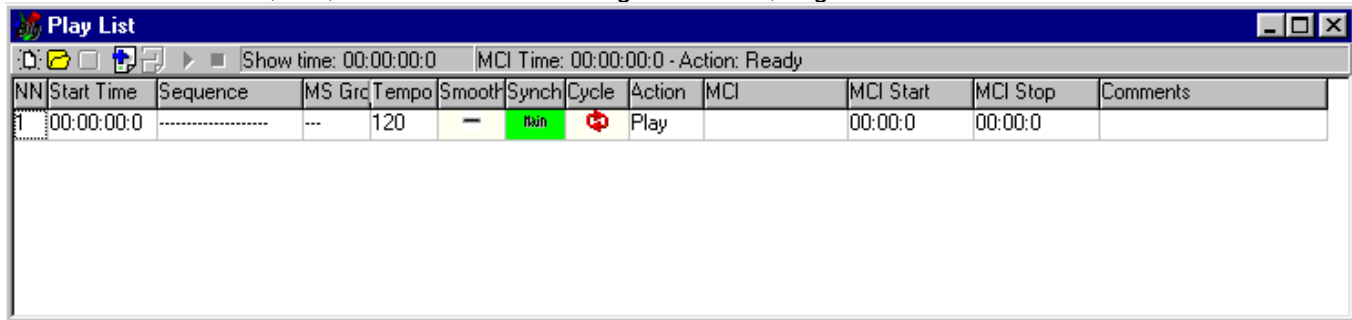
Um den Multi-Sequence Player wieder zu verlassen, drücken Sie die Tastenkombination (Vorlage „F8").
Das Hauptprinzip der Sequenzmischung ermöglicht es, den maximalen DMX-Wert von 4 (oder weniger) gleichen Mischkanäle der aktiven Sequenzen.

Bitte beachten Sie: In diesem Modus wird „Full MIDI control" nicht unterstützt, Sie könne nur die Sequenznummer ändern wenn Sie MIDI Note On verwenden (bitte beachten Sie die Hinweise unter Synchronization, MIDI und Hardware).
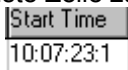
PLAY LIST

Sie benötigen die Play List, um größere, komplizierte Shows mit dem internen Timer synchronisieren zu können. Um die Play List zu öffnen, wählen Sie die View Play List-Option im Settings-Menü oder drücken Sie die Taste der zusätzlichen Leiste oder drücken Sie den Hot Key F6. Danach erscheint ein aktives Fenster, das, wenn es das erste Mal geöffnet wird, ungefähr so aussieht:

NN	Start Time	Sequence	MS Grc	Tempo	Smooth	Synch	Cycle	Action	MCI	MCI Start	MCI Stop	Comments
1	00:00:00:0	------------------	---	120	—	fixin	↻	Play		00:00:0	00:00:0	

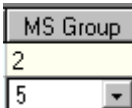Danach müssen Sie die erste Zeile aktivieren durch Drücken der Enter-Taste aktivieren. Drücken Sie erneut Enter, um die nächste Zeile zu aktivieren, wenn das Nummernfeld aktiv ist.

1. Start Time Feld.

Es ist wichtig zu wissen dass die Play Liste sofort startet, wenn die ▶ Taste gedrückt wird. Die interne Zeit wird gemessen ab dem Wert, der im Start Time Feld der ersten aktiven Zeile erscheint. Die Zeilen werden automatisch sortiert, so dass eine spätere Zeit eine höhere Ordnungszahl bekommt.

2. Sequence Feld.

Wählen Sie die benötigte Sequenz aus dem Auswahlmenü aus. Wenn Sie keine Sequenz benötigen, wählen Sie das Feld
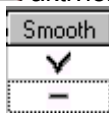
3.Multi Sequence player number Feld.

Wenn die Nummern 1 bis 12 aus der Auswahlliste gewählt werden, öffnet sich der Multi-Sequence Player und startet mit dem entsprechend angewählten Player. Dieser Player enthält die im Sequence Feld ausgewählte Sequenz. Wenn keine Nummer ausgewählt wird, wird der Multi-Sequence Player nicht aktiviert, bzw. sogar geschlossen, wenn er vorher geöffnet war.
Wenn Sie mehrere Player (des Multi-Sequence Player) gleichzeitig starten möchten, müssen Sie mehrere Zeilen gleichzeitig erstellen..

4. Tempo Feld.

Hat die gleichen Standard-Funktionen. Das Haupt-Tempo Feld ist inaktiv wenn die Play List und Tempo aktiviert sind.

5. Smooth Feld.

Aktiviert/Desaktiviert die "Smooth" Funktion (analog zur "Crossfade" Funktion), ähnlich wie unter "Settings"-"Synch and Hardware".

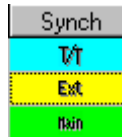

6. Synch Feld.

Hat die gleichen Standard-Funktionen. Kann im Normal und Multi-Sequence Player verwendet werden. Dieses Feld wird z. B. benötigt wenn Sie Midi-Dateien mit Lichtsteuerinhalt über einen virtuellen Midi-Treiber starten möchten.

7. Cycle Feld.

Kann im Normal und Multi-Sequence Player verwendet werden. Sequenzen ohne Cycle-Funktion stoppen bei der letzten Szene. Die nächste Schleife kann nur über die Timer- und Goto-Funktion gestartet werden.

8. Action Feld.

Normalerweise wird diese Feld mit der Option Play verwendet, aber manchmal können andere Option benötigt werden. Erstellen Sie eine Zeile mit der Option End , um den Timer zu stoppen. Erstellen Sie eine Zeile mit der Option Goto NN um zum Wiederholungsteil der Play List zu gelangen(geben Sie eine niedrige Zeilennummer ein). Wählen Sie die Stop-Option, wenn Sie nur die erste Szene der dargestellten Sequenz benötigen.

9. Media Player MCI Feld.

Mit diesem Feld können Sie einige Medienfiles wiedergeben. Diese Files können über spezielle Markierungen zwischen Start und Stop gesteuert werden. Diese Marken können als Zeit dargestellt werden,

die bei 00:00:0 beginnt und bei 03:19:3 endet.

10. Comments Feld.

Beschreiben Sie die Aktion der Zeile in diesem Feld.

MEDIA PLAYER

Der Media Player kann vom Menü Settings oder über den Hot key F5 aufgerufen werden. Außerdem von der zusätzlichen Leiste , Taste . Die Bedienung erfolgt wie beim Windows Media Player (Mplayer.exe). Der Media Player kann auch im Hintergrund laufen, nachdem er in der Play List aktiviert wurde.

DAS TOOLBAR ZUR SHOW WIEDERGABE

Die ▶ Taste dient zum Wiedergabestart der SHOW.

Die ■ Taste stoppt die Wiedergabe.

Die **Cycle** Taste setzt die aktuelle SEQUENZ in den Zyklusmodus.

Die **Tempo** Taste ermöglicht Ihnen, die Wiedergabegeschwindigkeit manuell anzutippen, so daß sie sie an die Musik anpassen können.

Mit den Up/Down-Tasten können Sie die Geschwidigkeit 120 zwischen 2 und 600 Szenen pro Minute auswählen.

Synch main Tempo ist eine 3-Modi-Taste:

Der Hauptmodus hat die Wiedergabegeschwindigkeit, die wie oben beschrieben eingestellt wurde.
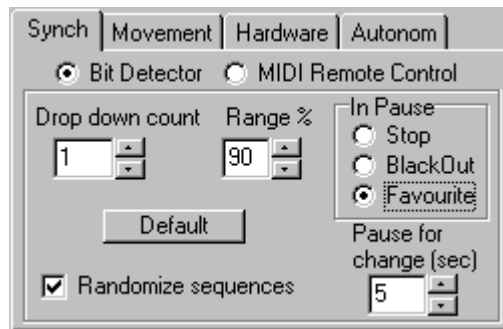
Tempo Track Synch Dieser Modus hat die Wiedergabegeschwindigkeit der SEQUENZ.

Ext Synch Dieser Modus ermöglicht die externe Audio-Synchronisierung durch den eingebauten Beatsensor im Interface; weitere Parameter zur Synchronisation finden Sie in dem Auswahlfeld «Setting» , Untermenü «Synch and Hardware».
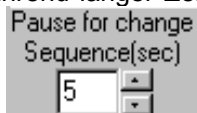
SYNCHRONISATION, MIDI UND HARDWARE

Über die Auswahl «Synch», Option «Bit Detector Enabled», Parameter «Drop down count» können Sie festlegen, wie viele SZENEN nach verlorener Synchronisation der Audioquelle gezeigt werden. Dabei ist die "External Synch" Taste gelb unterlegt. Der Parameter «Range %» legt fest, in welchem Bereich dem Baßschlag im Vergleich zur gewählten Abspielgeschwindigkeit gefolgt wird, z. B. «Drop down count» = 1 und «Range %» = 90%: die SZENEN folgen sofort nacheinander sobald die Mikrofonsignale empfangen werden auch bei einem sehr unruhigen Takt. «Drop down count» = 100 und «Range %» = 5 %: Die SZENEN folgen nacheinander unabhänging vom Mikrofon, aber in Abhängigkeit der voreingestellten Wiedergabegeschwindigkeit (wie im Geschwindigkeitsfenster 120).
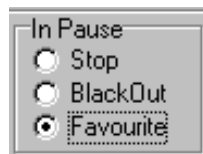
Über die Auswahl «In Pause» mit dem Parameter "Pause for Change" können Sie einstellen, was die Geräte während langer Zeiträume ohne Musiksignal machen sollen. Nach Verstreichen der Zeit "Pause for Change" werden die Geräte in den Blackout oder einen Favoriten-Modus gesetzt. Über die Auswahl "Randomise sequences" können Sie festlegen, daß die folgende Sequenz einer Show nicht gestartet wird, sondern eine Sequenz zufällig ausgewählt wird, die dann beim Empfangen des ersten Musiksignals nach der Pause gespielt wird. Dies erlaubt eine automatische Steuerung ohne Eingreifen des Lightjockeys.

Wenn Sie die Sequenzen und Szenen über eine MIDI-Quelle steuern möchten, wählen Sie die Option "MIDI Remote Control".
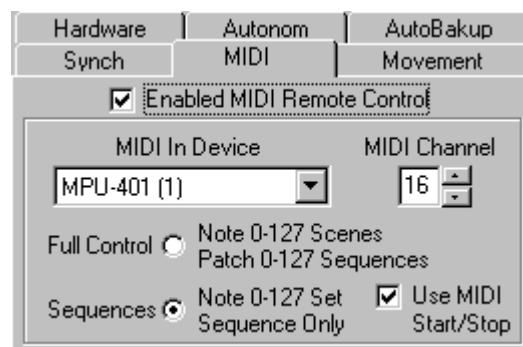
Wenn die beiden Tasten "Synch" und "Play" gewählt werden und der MIDI-Befehl "Note On" auf dem gewählten MIDI-Kanal empfangen wird, ändert sich die aktuelle Szene auf die Szenennummer, die dem MIDI-Signal entspricht. Wird der MIDI-Befehl "Program Change"(Patch) empfangen, ändert sich die aktuelle Sequenz auf die Sequenznmmer (Patch), die dem MIDI-Signal entspricht.
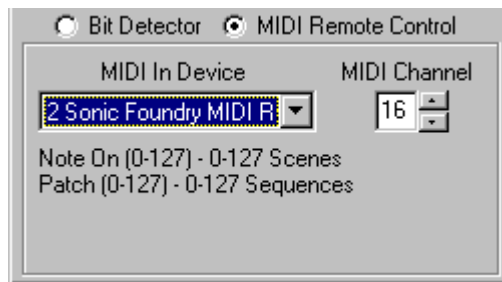
Über ein externes MIDI-Pult lassen sich die Szenen und Sequenzen ansteuern. Und mit den gewählten Treibern "MIDI Router" "Sonic Foundry" können Sie andere weitentwickelte Sequenzer wie Cakewalk, Cubase zur Gestaltung der MIDI-Lichtsteuerung einsetzen.
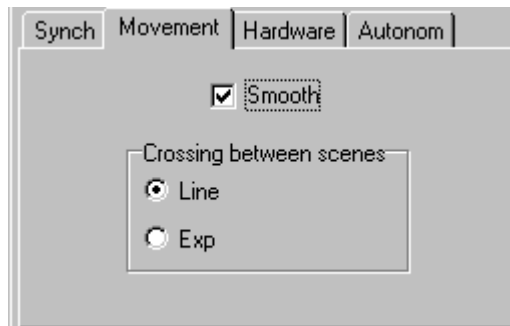
Die Auswahl «Movement».
«Smooth» ermöglicht ein sanftes Faden der Pan/Tilt-Kanäle.

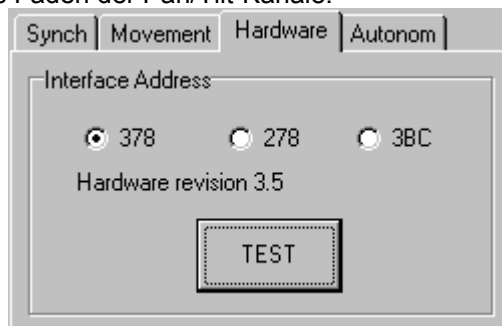Über die Auswahl "Hardware" können Sie die Basisadresse des Druckerports auswählen, an den das Interface angeschlossen wird. Nach Einstellen der Basisadresse drücken Sie die"TEST" Taste um die Einstellung abzuspeichern und die Verbindung zwischen Rechner und Interface zu testen.

Danach werden alle DMX-Kanäle am Interface auf "0" zurückgesetzt. Um die Kanalwerte wiederherzustellen

drücken Sie die Taste "Restore" oder _____.

Die Auswahl «Autonom» dient zur Programmierung von Blitzprogrammen des Controller der Version 3.5 und höher. Dadurch läßt sich das Interface ohne Rechner über die Musik ansteuern und Sequenzen und Szenen abspielen, die vom Rechner aus programmiert wurden.
Nach der Programmierung können Sie den Rechner auschalten und das Interface ausstecken. Die Wiedergabe erfolgt automatisch wie vorher programmiert.

Technische Daten (Version 3.5 des Controllers):

Speicherbare Sequenzen	bis zu 100
Anzahl der Szenen je Sequenz	bis zu 255
Gesamtkapazität	2000 Szenen
Anzahl wiederprogrammierbarer Zyklen	>10000
Programmierdauer für 2000 Szenen	~ 7 Minuten (0,2 Sek./Szene)
Sequenzwiedergabe	Zufällig oder aufeinerfolgend
Audio Pause-Sensor	2...120 Sek.
Pausenüberbrückung	Stop, Blackout, Favourite

Über die Taste "Autonom" können Sie den eigenständigen Betrieb aktivieren. In diesem Modus startet der erste Baßschlag den Zufallsgenerator.

„AutoBackup" Bookmark.
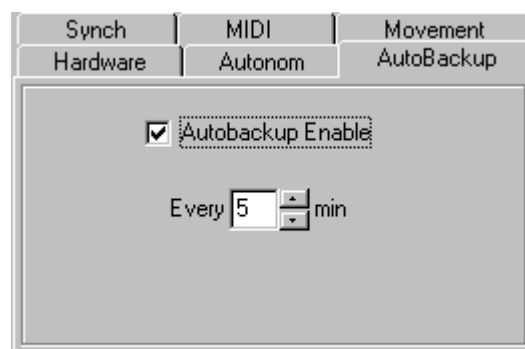
Mit dieser Funktion können Sie automatisch eine Auto-Backup Datei „$AutoBak.dmx" erstellen lassen. Dabei wird die aktuelle Show in den ausgewählten Zeitabständen in dieser Datei abgespeichert. Bei einem Systemabsturz oder Stromausfall können Sie dann die letzten Vorgänge wieder aus dieser Datei laden.

DAS DATEI-TOOLBAR

Mit der ⬚ Taste starten Sie eine neue SHOW.

Mit der 📂 Taste können Sie eine vorher programmierte SHOW von der Festplatte laden.
Während der Wiedergabe einer Show können Sie eine weitere Show laden, ohne daß dadurch die Wiedergabe gestoppt wird, aber in diesem Fall wird die Konfiguration der geladenen Geräte nicht überprüft sondern nur die Sequenzen und Szenen geladen.

Mit der 💾 Taste können Sie eine SHOW-Datei abspeichern.

Mit der 💾 Taste können Sie unter Save as eine SHOW unter einem neuen Namen abspeichern.

Mit der 🗝 Taste können Sie die DMX-Kanäle und die Belegung der Geräte einstellen.

Mit der ✏ Taste können Sie Änderungen in einer SZENE rückgängig machen.

DIE BLACK OUT TASTE

Die **Black Out** Taste schaltet alle Geräte in den Blackout-Modus und stoppt auch die Wiedergabe einer Show. Bei dieser Funktion wird auch die Wiedergabe der Show gestoppt. Die Funktion kann auch über eine Tastenkombination aufgerufen werden (Vorlage F11).

DIE «FAVOURITE» TASTE

Die **Favourite** Taste setzt die Kanäle aller Geräte in den «Favourite» Modus und stoppt die Wiedergabe der SHOW. Die Werte der «Favourite scene» lasen sich einstellen, indem Sie in einer beliebigen Szene mit der rechten Maustaste auf die «Favourite» Taste drücken. Die Funktion kann auch über eine Tastenkombination aufgerufen werden (Vorlage F10).

VALUES/TEMPO EDITOR
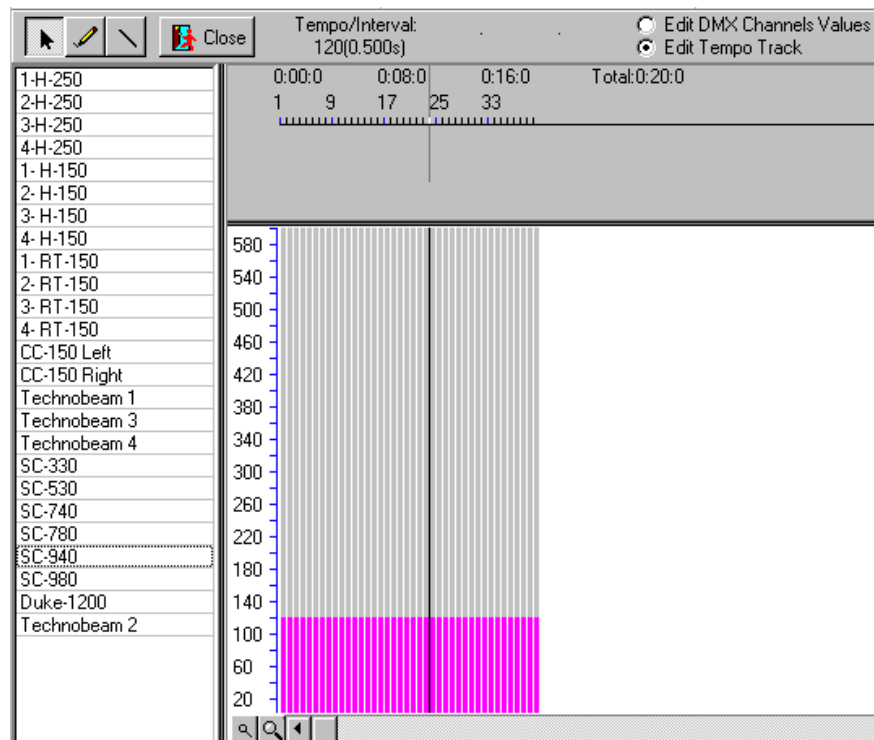
Dieser Editor dient dazu, die Informationen in einer digital-grafischen Darstellung zu editieren.
Der Editor arbeitet in zwei verschiedenen Modi: " Edit DMX Values " und " Edit Tempo Track ".
Um zwischen diesen beiden Editoren zu wechseln, clicken Sie in das entsprechnde Kontrollkästchen

○ Edit DMX Channels Values
◉ Edit Tempo Track .

DMX values Editor (wählen Sie die Option **◉ Edit DMX Channels Values**).
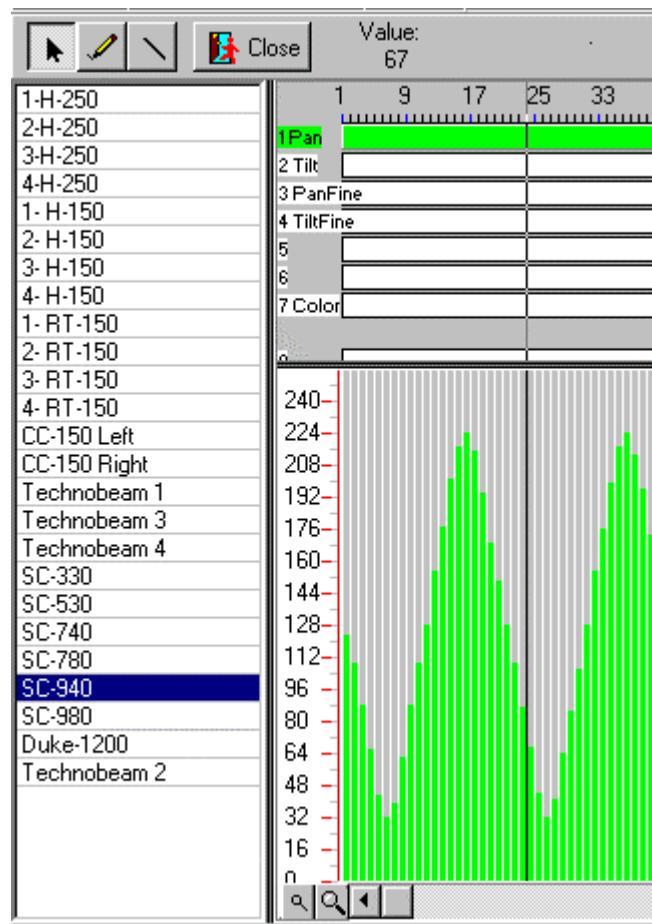
Editieren von DMX-Werten

Im "DMX Values Editor" " können Sie die digitalen Werte der DMX-Signale als Spalten editieren. Jede Spalte zeigt den DMX-Wert einer SZENE des gewählten Kanals. Die aktive SZENE is mit einem großen

Cursor markiert, der Wert des aktiven Kanals in der aktiven SZENE wird links oberhalb des Lineals
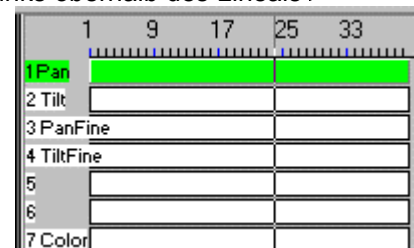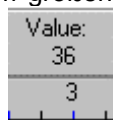
angezeigt. Sie können den aktiven Kanal in der Channel Screen auswählen, wobei grün unterlegt aktiv bedeutet, so wie Sie aktive Projektoren auf der Fixture's Screen
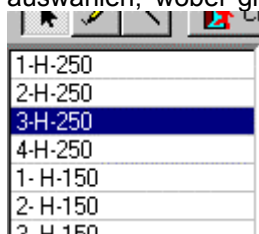
 auswählen können.

Dabei gibt es zwei Werkzeuge: einen Stift und ein Lineal , die sich aus der Toolbar auswählen lassen. Außerdem ist auch Kopieren/Einfügen möglich. Die zu kopierende Information kann wie folgt ausgewählt werden:

Auswahl eines Teil der Gerätesequenz mit allen Kanälen. Wählen Sie die Szenennummern über den Zeiger aus. Drücken Sie die rechte Maustaste und wählen Sie aus dem Kontextmenü den Befehl "Kopieren". Um die kopierten Szenen einzufügen, ist es notwendig, die benötigte Szenennummer zu markieren und dann im Kontextmenü "Einfügen" zu wählen.

Die zweite Methode ist, eine beliebige Anzahl nebeneinanderliegender Tracks zu kopieren. Wählen Sie dazu die benötigten Attributestracks und Szenen und wählen Sie "Kopieren" im Kontextmenü.

Bei allen anderen Befehlen sind die beiden Methoden identisch. Die Befehle Kopieren/Einfügen sind während der SHOW-Wiedergabe nicht unterlegt.

Die «Refresh» Taste (Tastenkombination Ctrl+R) hat hier eine Rückgängig-Funktion.
Clearing
Wenn Sie Funktion Clear Selected aus dem Kontextmenü auswählen werden all Tracks des ausgewählten Bereichs auf 0 gesetzt.

Editing Tempo Track:
Hier ist als Werkzeug auch ein Stift und ein Lineal verfügbar. Alle Editierbefehle entsprechen denen mit Editierwerten, aber die Auswahl eines Gerätes hat keinen Effekt. Außerdem läßt sich die Szenenlänge anzeigen, die Sie mit dem Stift verändern können, so daß die Szenen mit verschiedenen Längen programmiert werden können. Bei der Wiedergabe hat dann jede Szene eine andere Länge und wenn Sie

während der Wiedergabe auswählen folgt das Programm diesen Zeitvorgaben. Änderungen im Tempo-track lassen sich nicht rückgängig machen.

TRACK EDITOR
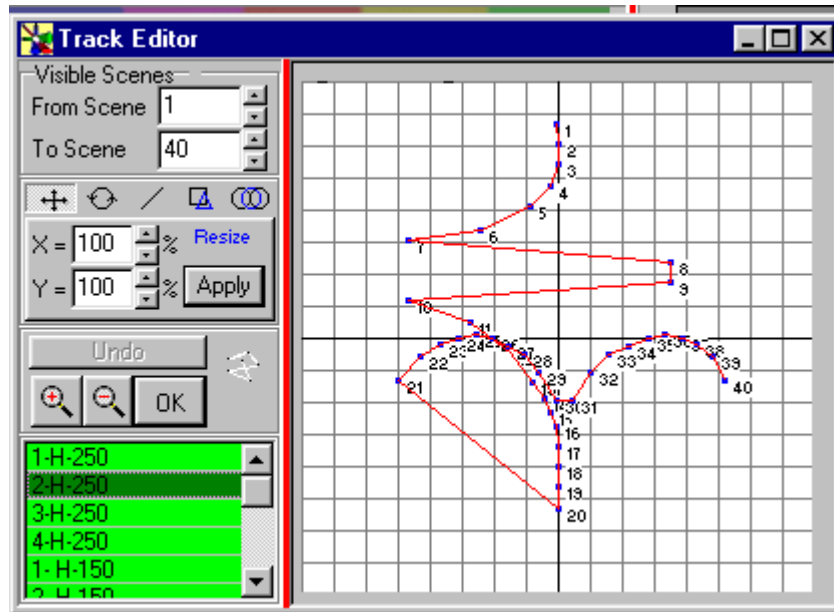
Dieser Editor kann für Geräte mit Pan/Tilt-Steuerung eingesetzt werden.

Die Strahlenposition läßt sich in allen Szenen anzeigen.

Der Lichtstrahl des gewählten Gerätes läßt sich über die Maus an den gewünschten Ort bewegen.

Außerdem läßt sich eine Gruppe von Positionen auwählen, indem alle ausgewählten Positionen zu einer neuen Position gefahren werden.

Desweiteren gibt es die "Sewing machine". Damit läßt sich Gerät auf Gerät und Szene auf Szene "säen", weil alle Geräte zusammen bewegt werden und die Einstellungen Szene auf Szene zeigen außer des mit der Maus gesteuerten Gerätes.

Sie können auch einen Teil der Bewegung weicher machen, indem Sie die «Linearize» Taste drücken und den benötigten Algorythmus auswählen.

Das Kontrollkästchen «Real time update» läßt sich während der Wiedergabe umschalten, so daß Sie die Korrekturen während der Wiedergabe sehen können.

POSITIONSSPEICHER

Die Positionsspeicher entsprechen den Positionspaletten wie sie in Rock & Roll Pulten verwendet werden. Mit diesen Speichern können Sie eine Anzahl von verschiedenen Positionen wie z. B. Bühnenmitte, rechter Bühnenrand, linker Bühnenrand etc. für die angewählten Projektoren speichern und in einer Szene zuordnen. Wenn Sie die Show in einem anderen Gebäude abspielen wollen, dort jedoch andere Trussinghöhen gegeben sind, können Sie alle programmierten Szenen und Sequenzen einfach aktualisieren, indem Sie die Positionspaletten einfach auf den korrekten Wert einstellen.

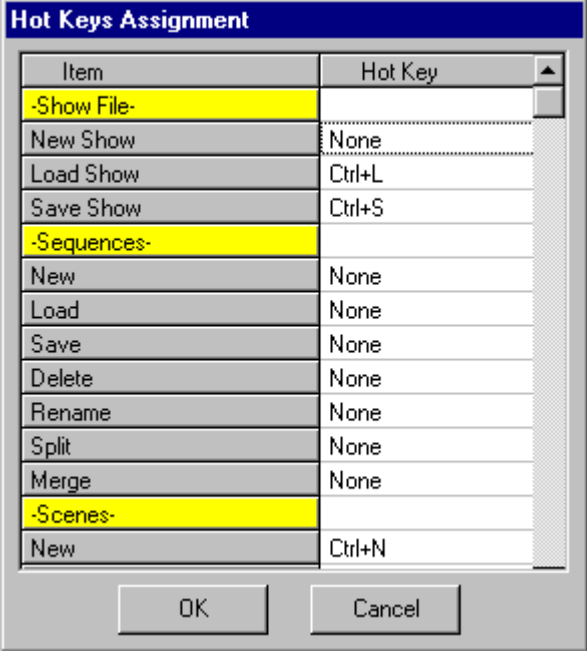Diese Software verfügt über 32 Positionsspeicher, in denen Sie die Pan/Tilt-Positionen aller Geräte speichern können. Diese Szenen können Sie dann über die Nummern 1 bis 32 zuordnen (indem Sie den entsprechenden Menüpunkt aus dem Kontextmenü auswählen, das Sie durch Klicken mit der rechten Maustaste auf den aktuellen Szenennamen öffnen können). Danach können Sie die Position verändern und in einer der

Positionsspeicherszenen speichern. Durch Drücken der Update-Taste werden alle Positionen der entsprechenden Szenen auf die neue Position gestellt.
Dieses Feature eignet sich besonders gut für den Mobilbetrieb.
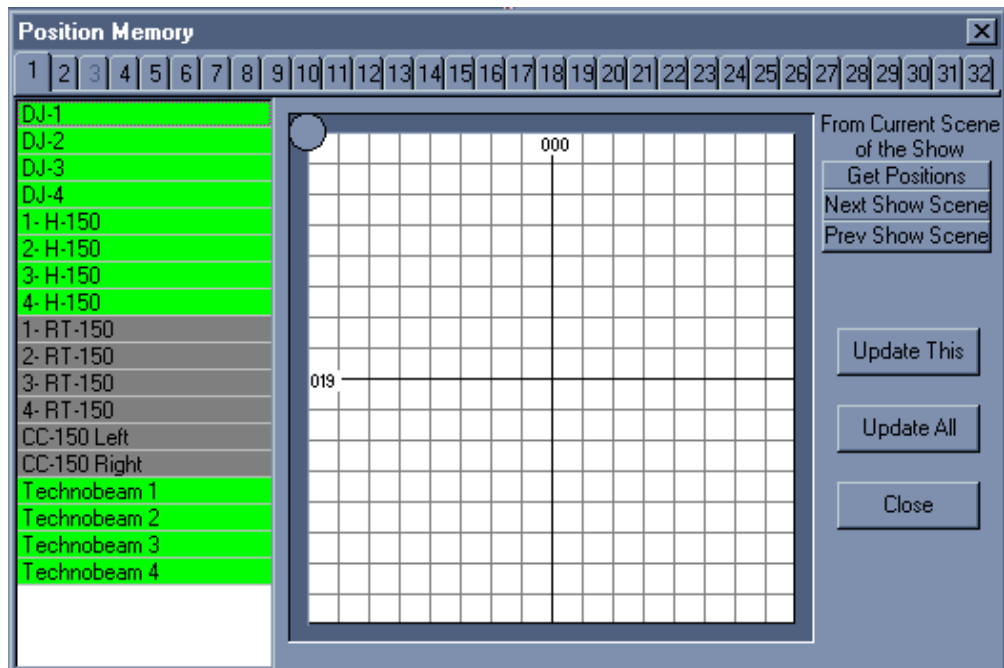
ZUWEISUNG VON FUNKTIONSTASTEN

Hot Keys Assignment Fenster...

Item	Hot Key
-Show File-	
New Show	None
Load Show	Ctrl+L
Save Show	Ctrl+S
-Sequences-	
New	None
Load	None
Save	None
Delete	None
Rename	None
Split	None
Merge	None
-Scenes-	
New	Ctrl+N

OK   Cancel

DMX SIGNALPARAMETER

Die Zeitparameter des DMX-Signals entsprechen den Anforderungen von USITT "DMX512/1990"

ZEITDIAGRAMM
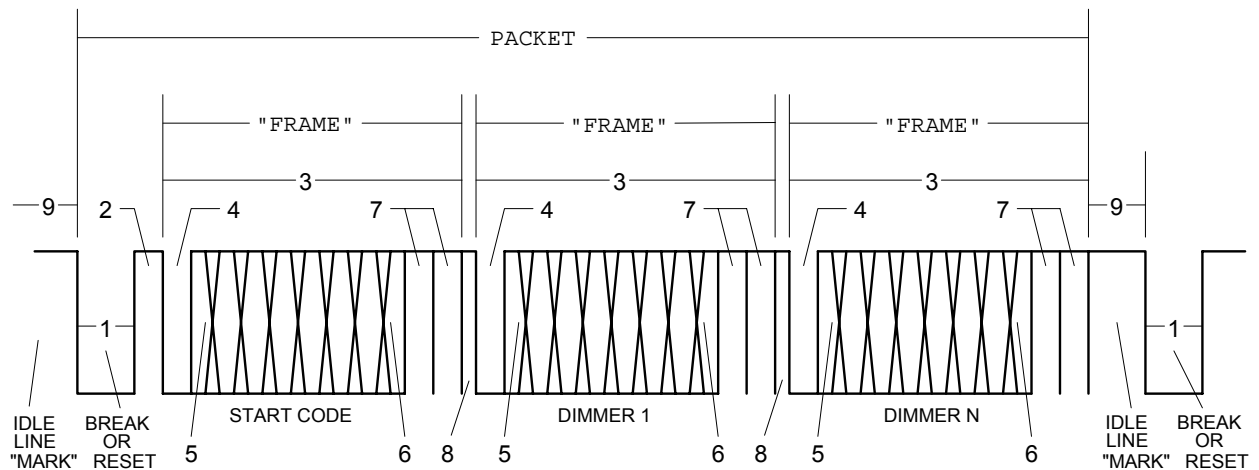
A Figure 1 for the DMX512/1990 timing diagram.

DESIG	DESCRIPTION	MIN	TYP	MAX	UNIT
1	"SPACE" FOR BREAK	88	88	90	μSEC
2	"MARK" BETWEEN BREAK & START	8.00	-	10	μSEC
3	FRAME TIME	43.12	44.0	44.48	μSEC
4	START BIT	3.92	4.0	4.08	μSEC
5	LEAST SIGNIFICANT DATA BIT	3.92	4.0	4.08	μSEC
6	MOST SIGNIFICANT DATA BIT	3.92	4.0	4.08	μSEC
7	STOP BIT	3.92	4.0	4.08	μSEC
8	"MARK" TIME BETWEEN FRAMES	0	0	2	μSEC
	PACKET TIME	-	22.67	-	mSEC
	PACKET REPEATITION EVERY	49	50	51	mSEC

TABLE 1 for the DMX512/1990 timing diagram.
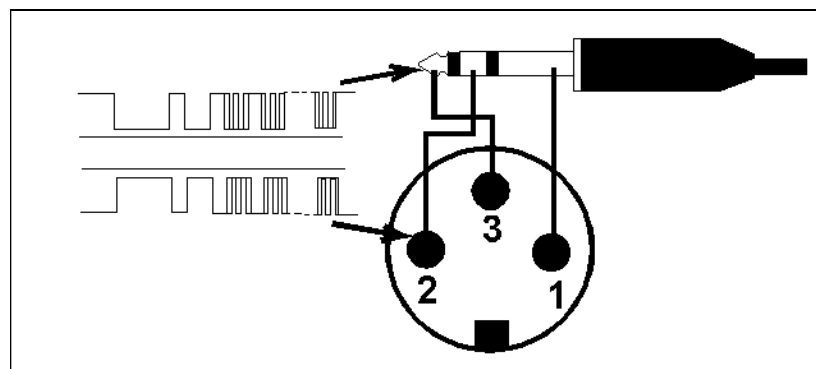
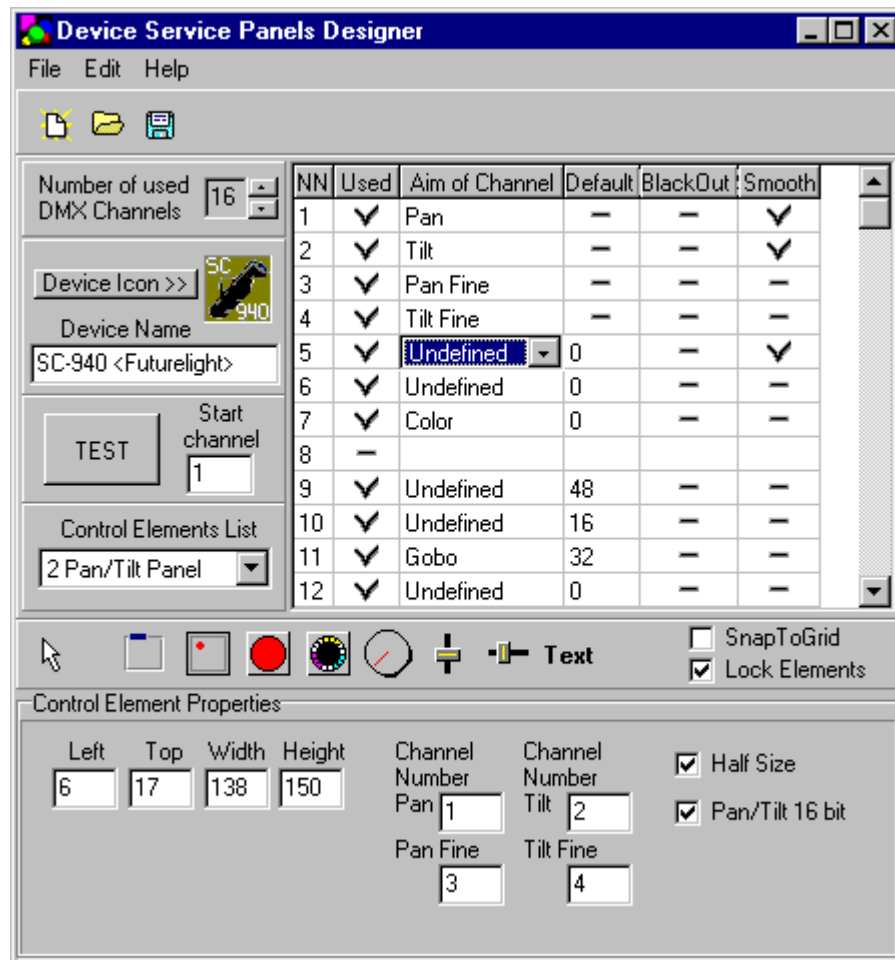Correspondence of contacts of the plug stereo jack and XLR-3.

SERVICE PANEL DESIGNER

(Projektorvorlageneditor)

Dieser Editor soll zur Erstellung von Servicepanels dienen und dazu, diese innerhalb der Steuerungssoftware zur Projektorsteuerung zu benutzen.

Es gibt 2 Möglichkeiten zum Anlegen eines Servicepanels:
1. Laden Sie ein zuvor erstelltes Panel, verändern Sie es nach Ihren Wünschen und speichern Sie es unter einem neuen Namen ab.
2. Erstellen Sie ein neues Panel.

Zuerst müssen Sie die Anzahl der vom Gerät verwendeten DMX-Kanäle eingeben. Als nächstes müssen Sie eine Maske der verwendeten Kanäle erstellen. So belegt z. B. der Projektor «DATAMOON» von NJD 4 DMX-Kanäle, aber Kanal 2 ist nicht belegt oder der «CC-150» von Futurelight – der 4 DMX-Kanäle belegt, aber nur einen benutzt - «Nummer 4». Bitte cklicken Sie auf das Kästchen des entsprechenden Kanals im Fenster «Mask of used channels», wenn er belegt ist und deaktivieren Sie das Kästchen, wenn der Kanal nicht belegt ist.

Im Feld «Device name» können Sie den Projektornamen eingeben. Dieser Name wird dann zur Identifizierung des Projektors von der Software verwendet. Diese Namen lassen sich im Fenster «Setting of DMX channels» unter der Überschrift «Type of service panels» betrachten. Als Namen können Sie den Typ und die Marke des Gerätes eingeben.

Wählen Sie danach das zu verwendende Symbol für den Projektor aus (dieses Symbol wird im Fenster Plan angezeigt). Sie können auch Ihr eigenes Symbol mit jedem Bitmap-

Programm wie z. B. Microsoft Paint erstellen. Die Symbolgröße muß 32*32 Pixel betragen und darf 16 oder 256 Farben haben.

Die Toolbar-Leiste der verfügbaren Werkzeuge sieht wie folgt aus:

Sie können jedes Element der Toolbar auswählen und auf ein leeres Formular des Service Panels clicken. Jedes Element hat seine eigenen Eigenschaften. Die folgenden Elemente sind verfügbar:

1. Container - zusätzliches nicht aktives Element, das dazu verwendet werden kann eine Gruppe von Steuerelementen von anderen Elementen zu trennen. Darin enthaltende Elemente können mit der Maus im Hauptfenster bewegt werden. Eigenschaften: Links, oben, Breite, höhe, Container-Überschrift, Farbe, Schriftart. Bevor Elemente in den Container gelegt werden können, muß der Container mit der linken Maustaste ausgewählt werden.

2. Pan/Tilt Panel - aktives Steuerelement zur Pan/Tilt-Steuerung von Scannern oder Moving-Heads mit dieser Funktion. Die Positionen im «Pan/Tilt Panel» können mit der Maus angewählt werden. Eigenschaften: Links, Oben, Breite (fix), Höhe (fix), Pan-Kanalnummer, Tilt-Kanalnummer. Die Eigenschaft «Has two sizes» wird dazu verwendet, dieses Feld zu halbieren. Wenn Sie diese Eigenschaft auf «True» ändern, wird es so angezeigt. Drücken Sie dann die «TEST» Taste und clicken Sie mit der rechten Maustaste auf das «Pan/Tilt panel», und das Element wird groß. Drücken Sie nochmals auf die rechte Maustaste und das Element wird klein. Diese Eigenschaft kann verwendet werden, wenn kein weiteres Steuerelement mehr plaziert werden kann.
Wenn Sie im Arbeits- und Testmodus des Programms die «Ctrl» Taste drücken, wird die horizontale Bewegung gesperrt und wird die «Shift» Taste gedrückt können Sie die vertikale Bewegung sperren.

3. Farbtaste - aktives Steuerelement um einen einzelnen Wert eines bestimmten DMX-Kanals einzugeben. Eigenschaften: Links, oben, Breite, Höhe, DMX-Kanalnummer, eingebener Wert, Farbe.

4. Mustertaste - aktives Steuerelement um einen einzelnen Wert eines bestimmten DMX-Kanals einzugeben. Eigenschaften: Links, oben, Breite, Höhe, DMX-Kanalnummer, eingebener Wert, Muster (kann auch mit «Paint» erstellt werden, s.o.) Sehr nützlich für Gobos, Strobes und andere Events.

5. Knopf-Taste - aktives Steuerelement zur Steuerung variabler Parameter des gewählten DMX-Kanals innerhalb eines Intervalls. Eigenschaften: Links, oben, Breite, Höhe, DMX-Kanalnummer, Minimalwert und Maximalwert. Die Farbe dient nur zur Dekoration und wird nicht benötigt.

6. Vertikaler Fader - gleiche Funktion wie Knopf-Taste.

7. Horizontaler Fader - Variation, s. o.

8. Text symbol TEXT - nicht aktives Steuerelement, das zur Eingabe von Textkommentaren auf dem Panel verwendet werden kann. Eigenschaften: Links, oben, Breite, Höhe, Beschriftung, Farbe, Schriftart, Transparent.

Nach der Positionierung auf dem erstellten Panel kann jedes Element über die Maus oder durch Drücken der «Shift» Taste und den Pfeiltasten in jede beliebige Größe gezogen werden. Es läßt sich löschen durch Drücken der «Delete» Taste (die Löschung eines Containers löscht alle enthaltenen Elemente). Durch Drücken von «Ctrl/D» können Sie das gewählte Element kopieren.

Das Kästchen «Snap to grid» aktiviert die Gitternetzlinien.

Das Kästchen «Locks Elements» verankert das Element auf seiner Position.

In der Liste «Control element list» können Sie die Gesamtliste aller Elemente des Panels einsehen.

Sie können eine Vorlage für jeden Kanal erstellen, indem Sie in dem Panel «Mask of used channels» wählen und den Wert (-1) einstellen, der nicht definiert bedeutet. Außerdem läßt sich das Ziel «Aim of channel» auswählen, wenn Sie über Pan/Tilt-Steuerung

verfügen ist es sinnvoll, die entsprechenden Kanäle auf «Pan» und «Tilt» zu stellen. Dann können Sie den «Track editor» im Hauptprogramm verwenden. Wenn Sie über eine Farbsteuerung verfügen, ist es nützlich, das Ziel diese Kanals auf «Colour» zu stellen, etc. Diese Einstellung wird im «LOGICAL MASTER» Modus verwendet.

Mit einigen Geräten gibt es Probleme, vom Blackout-Modus zurückzukehren. Dieser Modus läßt sich kanalweise definieren in dem Sie den Blackout-Wert eingeben. Drücken Sie dazu die Taste «BlackOut» im Haupprogramm und die Projektorkanäle senden den von Ihnen bestimmten Wert (außer «0»).

Durch «Start channel» und Drücken der «TEST» Taste könen Sie Ihre Projektorvorlage im Realtime-Modus überprüfen mit dem tatsächlichen Gerät und Sie können auch die Kanäle auf dem «Control Elements Properties» Ppanel betrachten.

Das Textfeld im Panel «User Defined Control Panel Header» wird im Hauptprogramm verwendet, um die benutzerdefinierten Überschriften verschiedener Geräte desselben Typs zu positionieren. Bitte verwenden Sie dieses Feld niemals.

Alle«Device service panel(.dsp)» Dateien müssen sich in dem «Device» Ordner befinden, um für die Steuerungssoftware verfügbar zu sein. Nicht benötigte Projektorvorlagen können aus diesem Ordner entfernt werden.

Mit etwas Phantasie können Sie auch Ihre eigenen Panel kreieren, die zwei oder mehr einfach Projektoren auf einem Panel enthalten.

Die Liste "Control Elements List" ist sehr hilfreich wenn Sie kontrollieren möchten ob sie zwei Elemente auf die gleiche Position gelegt haben oder außerhalb des Bildschirms.

In der Liste „Channels list" können Sie die ganze Liste der belegten Kanäle sehen.

    a) Sie können für jeden Kanal aus der Oberfläche „Mask of used channels" einen Vorgabewert definieren.

    b) Außerdem können Sie die Auswahl „Aim of channel" vornehmen, wenn Sie über Pan/Tilt Steuerung verfügen. Diese ist hilfreich, um die entsprechenden Kanäle auf „Pan" oder „Tilt" umzustellen.

    c) Sie können den Blackout-Wert für jeden Kanal eingeben. Dies ist z. B. hilfreich für bestimmte Lampen, die sehr lange Zeit benötigen, bis sie erneut gezündet werden können. Füllen Sie dazu das Fenster „Black Out State" aus. Die eingegebenen Werte werden dann an das Gerät ausgegeben, sobald die Blackout-Taste gedrückt wird.

    d) Sie können den Vorgabewert für jeden Kanal einstellen.

    e) Sie können den Smooth-Status definieren.

Um die Projektoren zu testen, müssen Sie die DMX Adresse festlegen. Geben Sie dazu die Startadresse im Fenster „Start channel" ein. Durch Drücken der „TEST" Taste können

Sie die Vorgabewerte des aktuellen Gerätes im Real-Time Modus testen. Schalten Sie Ihren Projektor and und verbinden Sie seinen DMX-Eingang mit dem DMX-Eingang des Wizard-Interface.

DMX Wizard 512

A. Introduction
B. What's new in 4.1X version
C. Making a SHOW
D. Control Panel Designer (Light fixture template editor)
E. The contents of the package, getting connected
F. Problems

A. Introduction

ATTENTION!!! To avoid electronic damage make sure that all DMX-fixtures and the computer are unplugged (from power) when you make DMX-connections!

The program is intended for discotheque lights management. The main features are simple learning and high-speed control of different types of light fixtures using the upgradable control panel library for the most popular light fixtures. That carries out a friendly interface for controlling a lighting fixture with image buttons. This buttons contain specific images (colors, gobos). One of important elements on a control panel is Pan/Tilt - field for controlling the movement of the beam (it is also possible to control using traditional sliders). The control of light fixtures is provided through the DMX interface, which is connected to computer through the printer port (LPT).

Main features:

1. The program can operate any light fixture, which has a DMX interface.
2. It can control any amount of light fixtures located on 512 DMX channels.
3. SHOW consists of up to 256 SEQUENCES, SEQUENCE has up to 16384 SCENES. The quantity of SHOW files is unlimited.
4. Each light fixture can have its own customized template (control panel), including color buttons and gobo pictures.
5. Traditional light software options - Pan/Tilt swapping and reverse, Multi-Sequence mode and so on.
6. Synchronization is possible from internal and an external source of sound. It is also possible to control the show via MIDI, including sequencer software etc.
7. Opportunity to redirect light fixtures to manual override at any moment of SHOW actions.
8. Super fast addition of a new light fixture to the previously created SHOW due to convenient operations of copying and editing.
9. The library of control panels (light fixture templates) can be extended by using the included panel designer (see chapter D Control Panel Designer).
10. The program is designed for Windows 95/98 using a screen resolution of 800x600 or higher.

(C) 2001

B. What's new in 4.1X version

Favourite button has 16 variations, which can be prepared preliminary. Favourite button can be quickly reassigned from one variation to another during the SHOW when necessary (see chapter C18).

In Play List «New string» and «Delete string» commands can be provided by the buttons (see chapter C13).

Now the software is compatible with Windows 2000 in demo mode.

Menu structure is changed.

Panel Designer is accessible from the main window (View menu, pop-up menu, Fixtures menu and a button). Fixture pop-up menu has "Open at Panel Designer" command. You can quickly improve wrong panel, save it, and return back to SHOW.

Help can be recalled from Dmx Setup window.

Some grammatical mistakes are improved.

Improved name window bug: when turning back from Panel Designer to Main window.

Some dialogs were renamed: "Position memory" to "Pan/Tilt update" and "Smooth" to "Crossfade".

Load dialogs for SEQUENCES and fixture SEQUENCES now reflect information about quantity of SCENES and quantity of channels (for fixture SEQUENCES).

DSP files are associated with Panel Designer PROPERLY.

Hot keys can be unassigned (neutralized)

"Master OFF" button now is on the Additional toolbar. It is also active for Yellow Master.

«Fixture OFF» command can be neutralized now with «All Fixtures ON» command.

«Open» and «save» folders are memorized separately in *.cfg file for all kinds of operations.

C. Making a SHOW

1. Beginning

Attention! If when starting the software you have received the message «DMX device is inaccessible», please read the chapter E. The contents of the package, getting connected.

The software shows the following dialogue on start up:

To create a new SHOW press «Create a new SHOW» **button, then you will be asked to configure the DMX patch (see chapter C22), here you can add and remove the various light fixtures to be used in your SHOW, then you need to enter the name of your first SEQUENCE:**
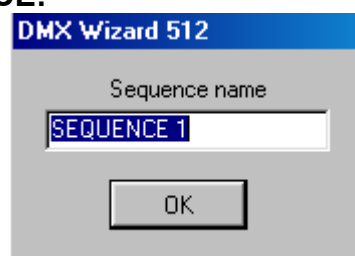
If you want to work with an earlier created SHOW press «Load a show»

 button and you will see the standard dialogue for opening the show file. Later for opening the last edited show use «Load a last show» button. SHOW file can be also opened right from the Windows Explorer with double click on it.

We described how you could start creating and changing the SHOW. But if you want to start from creating control panels (light fixtures' templates) see steps below.
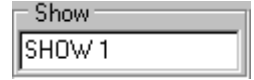

The «Control Panel Designer» button **opens the «Control Panel Designer» (see chapter D). See the appropriate section of the manual for further information. Panel Designer can be also opened with double click on a Control Panel file (*.dsp extension).**
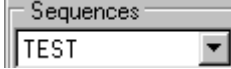
If you want to return back to Windows and don't open «DMX Wizard 512» program for now, press button.

2. SHOW Structure

1. SHOW consists of a set of SEQUENCES. Each sequence has name and index number. It is possible to give original name to any sequence.

The SHOW name can be changed in the SHOW panel: There is no any associations between show name and show file name. In this version you can not use Hot key letters in the SHOW name in this field.

2. The creation of a new SEQUENCE begins by pressing the button. Making it first time creates sequence number 1. The name of the SEQUENCE can be defined when creating it, or at any other moment of editing the SHOW. For this you have to select «Sequences List» option from the «Settings» of main menu or press F7. Then you can change name of any sequence from list clicking to correspondent name with the mouse. You can not use Hot key letters for the SEQUENCE name in «Sequences List» but you can do it using pop-up menu when you right-click on the SEQUENCE name field (Choose «Rename SEQUENCE» option). You can also use «Rename» command from «Sequences» menu as well as Hot keys (user defined).
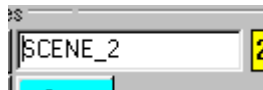
To remove an unnecessary SEQUENCE use the button in the SEQUENCES toolbar:

You can also use «Delete» command from «Sequences» menu as well as Hot keys (user defined).

The yellow label << >> with some number to the right of the SEQUENCE name is the index number of the SEQUENCE in SHOW.

3. The SEQUENCE consists of a set of SCENES. Each scene has name and index number inside of its SEQUENCE. The yellow label << >> with some number on the right of scene name is the index number of a SCENE in SEQUENCE. It is possible to give original name to any SCENE. The name of the SCENE can be defined when creating it, or at any other moment of editing the SHOW. You can not use Hot key letters in the SCENE name in SCENE name field but you can do it using pop-up menu when you right-click on the field (Choose «Rename SCENE» option). You can also use «Rename» command from «Scenes» menu as well as Hot keys (user defined).

The creation of a new SCENE begins by pressing the button. If you have chosen SCENE number 3 in 4-scene-sequence and press the button, you have new SCENE number 4 which is a copy of a SCENE number 3, and old SCENE

number 4 has new number - 5. By pressing **button in the «Scenes» toolbar**

 you can remove an unnecessary SCENE which is chosen at the moment.

The term SCENE can be explained as a statement of your light fixtures at each special moment of time (just after DMX date of scene was transferred).

If SEQUENCE contains more than one SCENE, during editing you can go from

one SCENE to another by pressing the buttons («Next» and «Previous»). Don't forget that the result of previous scene edition can be refreshed only before pressing one of this buttons. You can also use «Next» and «Previous» commands from «Scenes» menu as well as Hot keys (default «Ctrl» + «A» and «Ctrl» + «Q»).

3. Creating a SEQUENCE.

The most convenient way of creating a SEQUENCE is the following:

a) Press the «NEW SEQUENCE» button. You have a SCENE number 1 created along with new sequence.

b) Edit the first SCENE by setting all the involved light fixtures to necessary positions and attributes desired for this SCENE. Press necessary buttons on the control panels and change beam positions (pressing a «Ctrl» key, while cursor is over Pan/Tilt field locks horizontal movement of a Pan/Tilt target, and pressing a «Shift» key - locks vertical movement).

c) Press the «NEW SCENE» button. Thus the following SCENE will inherit the settings of the previous. Select the light fixtures to be in the next SCENE and set the positions and attributes. Saving of settings in a SCENE occurs by pressing the

«NEW SCENE» button or buttons, or by choosing another

SEQUENCE, or by pressing «Play» button. Before saving the scene, the

SCENE can be restored to the original settings by pressing the button («Refresh Scene»). You can also use «Refresh» command from «Scenes» menu as well as Hot keys (default «Ctrl» + «R»).

If you to make a quantity of same SCENES at once, make right click on the «New

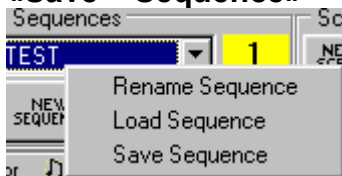SCENE» button. Then you will see «Making new scenes» dialog
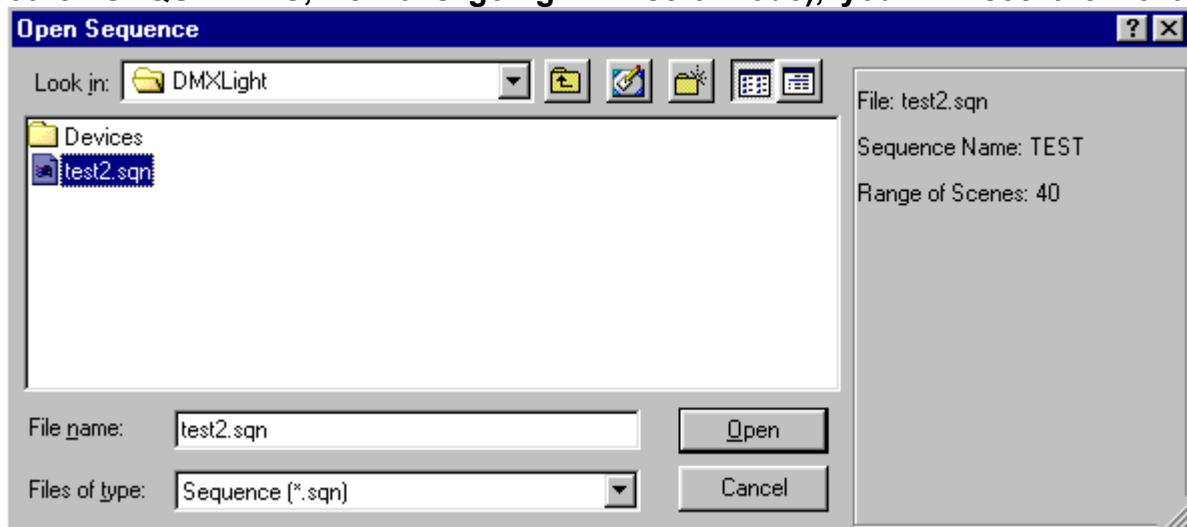
 . Type in SCENES quantity and press «OK».

d) Thus by pressing the «NEW SCENE» **button and setting light fixture positions and attributes and then saving, the SCENE can be created and the**

SEQUENCE can be expanded. By pressing the «NEW SEQUENCE» **button and then actions described above, the SHOW can be created and expanded. At any moment we can return back to any SEQUENCE and add or delete some SCENES in it.**

You can also use «New» command from «Sequences» menu as well as Hot keys (user defined). You can use «New» command from «Scenes» menu as well as Hot keys (default «Ctrl» + «N»).

Any SEQUENCE can be saved on a disk and loaded from a disk by choosing «Save Sequence» or «Load Sequence» option from the pop-up menu **(right-click by mouse on the SEQUENCE name). You can also use «Save» command from «Sequences» menu as well as Hot keys (user defined). If you choose «Load Sequence» command (the loading process doesn't delete any other SEQUENCES, i.e. it is going in insert mode), you will see the next dialog** **. In the right part of this dialog you can see information about chosen file: SEQUENCE name and quantity of SCENES.**

Any SCENE can be saved on a disk and loaded from a disk by choosing «Save
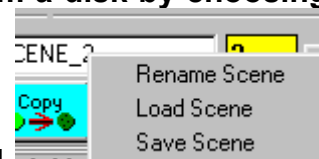
Scene» or «Load Scene» option from the pop-up menu **(right-click by mouse on the SCENE name). You can also use «Save» command from «Scenes» menu as well as Hot keys (user defined).**

Splitting and merging of SEQUENCES.
In «Sequences» menu you can see «Split» and «Merge» commands. «Split»

**command can be used for dividing of current SEQUENCE into to ones. The current
SCENE is a split-point (it becomes the first SCENE of second division). After
choosing «Split» command you will be asked for the name of the second daughter**
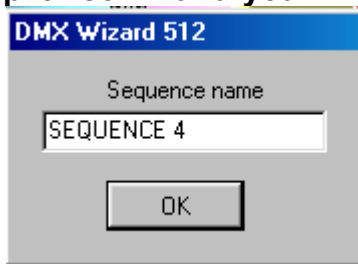
**SEQUENCE ⎯⎯⎯⎯⎯⎯⎯⎯ (the first daughter SEQUENCE will have the
same name as mother SEQUENCE). SCENE names don't change after splitting.
«Merge» command is used for merging 2 SEQUENCEs into one. If you choose
«Merge» command the current SEQUENCE becomes merged with the previous, but
the result SEQUENCE name is as it was in a previous SEQUENCE. SCENE names
don't change after merging.**

4. Playing sequences, playing SHOW

**When you need to try your show you can play current SEQUENCE pressing**

**«Play» button ▶ on transport bar ⎯⎯⎯⎯⎯. To stop the performance at
the current SCENE you need to press «Stop» button ■ . The default Hot key for
both operations is «F12» and it can be user defined, but anyway it have to be the
same key for «Play» and «Stop». You can see that the light fixture control panel is
changing during play (beam position, marked buttons, turning knobs and so on).
The same situation is when you are changing SCENEs manually while program is
being in edit mode (when stopped).**
**There is also possibility to play a SEQUENCE physically while virtual editing of
any SEQUENCE. To do the job you have to right-click by mouse on the «Play»
button and take «Play Current Sequence in Background» option. This option
provides <u>background playing</u>.**
ATTENTION!!! Background playing is not activated in DEMO mode!!

**In normal mode when you right click on the «Play» ▶ button, «Play Current
Sequence In Background» command can be activated**
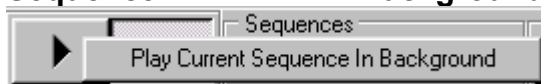
**. After choosing this command, «Play» button
starts blinking with red color ▶ . But in DEMO mode «Play Current Sequence In**


Background» command is disabled ⎯⎯⎯⎯⎯.
**During background playing the SEQUENCE (SEQUENCE which was chosen
while background start), all light fixtures have the same performance as while**

ordinary playing. But control panels' changes can be caused never by the played SEQUENCE; they can change only as a result of virtual editing. If you press «Start» and then «Play» your playing mode becomes ordinary (you can double press «F12»).

To the right of the transport bar, below the SEQUENCE number there is «Cycle Sequence» button , which is also a transport controlling element. When pressed it «Cycles» the current SEQUENCE so that while playing after the last SCENE SEQUENCE is started again. It happens as long as «Cycle Sequence» button is pressed. When it is released SEQUENCE stops just after the last SCENE.

«External Synch» button is used for switching of the synchronization mode. When it's yellow, external synchronization from the external sound source is provided. External synchronization parameters can be defined as described in Synchronization, MIDI and Hardware (see chapter C15).

When it's blue the synchronization from tempo track (see chapter C19) is provided. When it's green , internal beat generator, which frequency is controlled and highlighted in the frequency window , trigs SCENEs switching. It is also possible to control BPM (beat per minute) frequency by tapping on the «Manual Tempo Correction» button .

See also «Multi-Sequence Player» (see chapter C12).

5. SCENES copying.

The button copies a SCENE into the buffer. When pressing it, you can see that the and buttons appear in the «Scenes» toolbar. You can insert a SCENE copied to the buffer after any other chosen scene of any SEQUENCE by the «Insert» button or replace any chosen SCENE by the «Replace» button. You can insert the copied SCENE after any chosen SCENE of any SEQUENCE with button (the following SCENES change numbering for ...+1). You can also replace any SCENE with the copied SCENE using button (the following SCENES have the same numbering) You can also use «Copy» command from «Scenes» menu as well as Hot keys (default «Ctrl» + «Ins»).

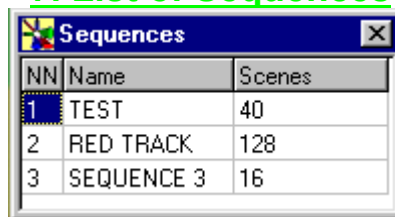## 6. Monitor, Sliders, Plan

On the top left side of the main window you can see 3 tabs: «Monitor», «Sliders» and «Plan».

«Monitor» tab window shows values of the light fixture channels in digital decimal form and also the user defined headers of the light fixtures' panels.

«Sliders» tab window shows the light fixtures channels values «in digital form» and corresponding sliders (you can change the value of any channel by moving those sliders).

«Plan» tab window shows your devices as icons with their user defined headers. You can move these icons with the mouse and place them in the correct location on the plan image. (Don't forget to «unlock icons» in the «Settings» menu). The Image for the plan window can be prepared with any graphics editor (as Microsoft Paint etc.) and saved in 16- or 256-colors mode. You can replace the plan image with your own painted picture through the «Change plan image» option of the «Settings» menu.

7. List of Sequences

The list of sequences is used to allow fast selection (by clicking) of the required sequence during SHOW playback and in editing mode. You can recall sequence list from the «Settings» menu or by using Hot key (default «F7»). Next pressing of «F7» closes the list of sequences. You also can use the additional toolbar [icons], button [icon].

You can change the order of SEQUENCEs in the List of Sequences using drag&drop operations. It can be done only when stopped.

If you operate with Sequence List when your Multi-Sequence Player is open (see chapter C12), you can see that Sequence List turns into Multi-Sequence map. You can fill check boxes, controlling which SEQUENCE is playing in which player. It was made for more rich choice of operation. If you close Multi-Sequence Player, Multi-Sequence map is turning back into the Sequence List.

# 8. Choosing a light fixture and setting its attributes

You can choose a light fixture for control by mouse clicking on the green light fixture header in the «Monitor» tab screen: , also the same in the «Sliders» tab screen, or you can click on the light fixture icon in the «Plan» tab screen: .

Then the heading of the chosen light fixture should turn dark green , font turns white, and the corresponding light fixture template (control panel) will appear to the right side of the tab screen.

You can control the attributes of a light fixture (pan/tilt for the beam of a scan, color, gobo, etc.) by changing position of sliders in the «Sliders» tab screen, or by typing in digital decimal numbers in edit text boxes of the «Monitor» tab screen. The easiest way is to control the light fixture from its control panel to the right side of the plan by pressing buttons and by using other types of user controls. The light fixture template (control panel) can look like this one:
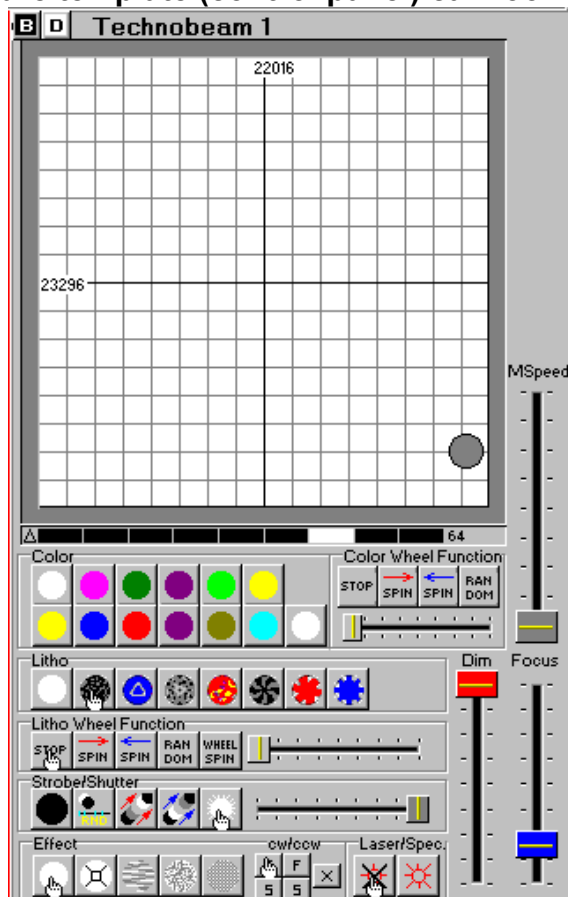
User can construct these light fixture templates (control panels) with template designer (see chapter D).

The way of light fixture templates (control panels) designing can be learned by exploring the ready ones attached to this software.

You can see two buttons in the left-top corner of the panel. Selecting sets selected light fixture into the defined «BlackOut» state, and sets it into the defined «Default» state. «BlackOut» and «Default» states values can be defined in

the <u>Control Panel Designer (see chapter D).</u>

9. Possible master modes

Each light fixture can work in one of the following master modes:
**1.NORMAL - «green mode»**

This is the usual mode of light fixture, in which, during the playback, the light fixture is following the commands contained in SCENES and SEQUENCES and changes its positions and attributes from one SCENE to another SCENE due to current tempo, the tempo track or beat detector. When the playback is stopped or when see <u>Playing sequences, playing SHOW (see chapter C12)</u>, you get the opportunity to control the device manually and to change any SCENE.

2.LOGICAL MASTER - «red mode»

«Logical Master» consolidates all light fixtures having the same templates (control panels), in one master group. You can switch on this mode by clicking on a fixture's icon at map or header at other tab windows with mouse while the "Ctrl" key pressed. Doing this first time sets all selected light fixtures in «Full Master» mode. Different kinds of «Logical Masters» can be selected from submenu:
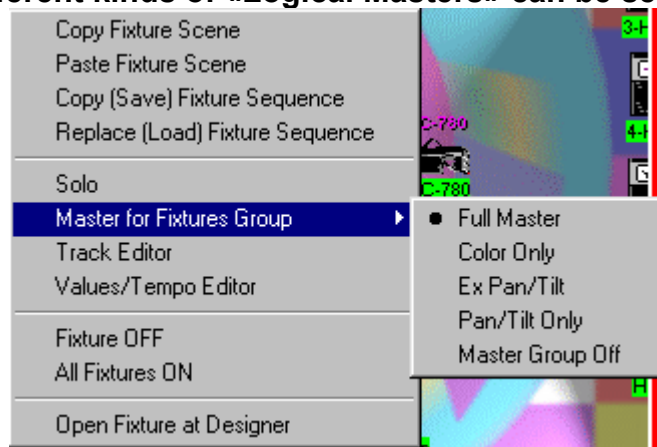
Choose "Master for Fixtures Group" of the context pop-up menu (click right-mouse button on the fixture's icon), and then, one of submenu options. When you select one of «Logical Masters» from that submenu all light fixtures having the same template join this group selected for this kind of «Logical Master». You can unselect all the (same panel) group choosing Master Group Off option in the same submenu.

Choose Full Master option of the submenu, if you want to control all possible features of the group being selected via one control panel.

Choose Color Only option of the submenu, if you want to control only «color» channels of the group being selected via the control panel.

Choose Ex Pan/Tilt option of the submenu, if you want to control all channels of the group being selected via the control panel, except for Pan/Tilt channels.

Choose Pan/Tilt Only option of the submenu, if you want to control only Pan/Tilt channels of the group being selected via the control panel.

All channels of the group being selected this way, which are not controlled by «Red Master», are involved in the SHOW as in a «Green Mode».

You can unselect some of the light fixtures by clicking on them by mouse while holding «Ctrl» key. If you then choose a light fixture with «Logical Master» already defined, while holding «Ctrl» key, the last defined kind of «Logical Master» will operate. You can unselect all «red» fixtures pressing [Help | Master Off] «Master Off» button to the right of the main menu, which appears only when some units are used for «Red» master.

The «Logical Master» mode has 2 unique features:

a) During playback the «red selected» light fixtures are fully or partly disconnected from current show control. They execute some or all commands from the light fixture template (which is the same for all selected light fixtures). This allows manual control of a group of the same light fixtures during a show. You can have VARIOUS types of «red» fixtures simultaneously, but you can control from one panel only the same kind. If you have chosen some light fixtures in «Red Mode», you can change their separate attributes from the «Sliders» tab window or from the «Monitor» tab window. Click on the correspondent header and make necessary changes during playback or editing. The rest of same kind «red» fixtures are not changing their parameters in this case, like they do, if you are doing the same from control panel.

b) During editing mode the common light fixture template for the group can change the attributes of the current SCENE. There is not faster way to change the same parameter for same fixtures at once, `than` «Red Master». Thus it is possible to use «Red Mode» for group editing of the show. If you need to make the same changes in a group of the same light fixtures, the best way is to do it in a «Red Mode», using common light fixtures' template.

Though «Red Master» has not its own channel map, like the «Yellow» one has (<u>see point C9.4 «Physical Master»</u>), you can use the «Yellow Master»'s map for disconnecting of some separate channels from the «Red Master» control. For this you need to click twice on the correspondent red cell on the «Yellow Master» channel map.

It is also useful to know, that [Copy Fixture Scene] ,
[Paste Fixture Scene] , [Copy (Save) Fixture Sequence] `and` [Paste (Load) Fixture Sequence]
commands of the Additional pop-up menu (<u>see chapter C10</u>) are disabled for «red» light fixtures.

3. MANUAL - «Blue Mode»

The mode is only for full manual control both during playback and when stopped.

Switching on or off the MANUAL mode is provided by holding «SHIFT» key on the keyboard when clicking on the light fixtures' icons at map or on its header at other tab windows. The icons or headers become «Blue».

The attributes of a «Blue» light fixture can be changed by all available ordinary ways. In this mode the light fixture follows only manual commands. If you made light fixture «Blue» it never follows the programmed show until you make it «Green» again. But some of the fixture's channels can appear to be under «Yellow Master» control (<u>see chapter C9.4 «Physical Master»</u>). You can use «Blue Master» in

EDITING MODE only for **MODELING**, because changes made for «Blue» light fixture can not be memorized.

Though «Blue Master» has not its own channel map, like the «Yellow» one has <u>(see point C9.4 «Physical Master»)</u>, you can use the «Yellow Master»'s map for disconnecting `of` some separate channels from the «Blue Master» control. For this you need to click twice on the correspondent blue cell on the «Yellow Master» channel map.

4.PHYSICAL MASTER - «yellow mode»

This mode is only for manual control from special sliders. In this mode you can assign the control of some defined DMX channels to one of 8 sliders of Physical MASTER window. You can open Physical MASTER window choosing option «Physical Master» from Settings menu. Channels assigned to the Physical MASTER are disconnected from show control. It is possible to use up to 8 master faders, each of which can control any quantity of DMX channels. From the moment of becoming «yellow» these channels have a high-level status and can be changed only from the Physical MASTER window.
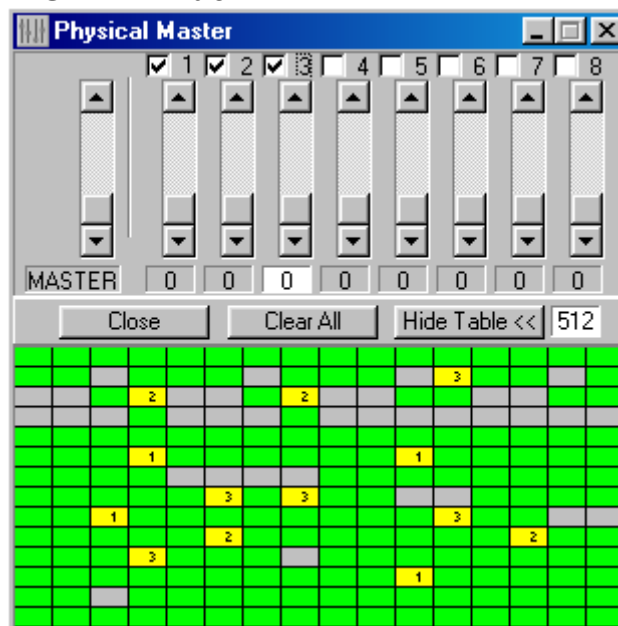
On the Physical MASTER window there is a «View Table» button, which you have to press for defining of the configuration and channel map revision. After pressing it you can see all 512 channels as a cells. Current mouse «cell

position» is indicated in the channel indication window , which shows the channel number of cell available for pointing by mouse at the moment. Gray cells mean free (from any light fixtures) channels, busy channels are presented with colored cells. Green cells mean channels controlled by SHOW, red - the ones controlled by «Logical Master», blue - channels controlled by «Manual Master». To assign some DMX channels to one of 8 Physical MASTER faders you have to choose correspondent fader and then to choose correspondent cell (channels). The chosen cells become «yellow» and you can see a fader number on it. To remove «the yellow control» from a channel you have to click on correspondent cell again one or two times (double-clicking is necessary when you do it while not correspondent 1-8 fader is active). By the way one time-clicking on a «blue» or «red» channel removes its depending on the correspondent master.

The main «MASTER» fader can be used for synchronous moving of all checked faders (pay attention on check boxes over 1-8 faders). You can not assign or unassign channels when the «MASTER» fader is chosen.

When starting a new SHOW all light fixtures are in NORMAL MODE («green»). In further steps fixtures' status can be memorized in SHOW file.

10. Fixtures pop-up Menu

It looks the next way:

Copy Fixture Scene
Paste Fixture Scene
Copy (Save) Fixture Sequence
Replace (Load) Fixture Sequence

Solo
Master for Fixtures Group ▶
Track Editor
Values/Tempo Editor

Fixture OFF
All Fixtures ON

Open Fixture at Designer
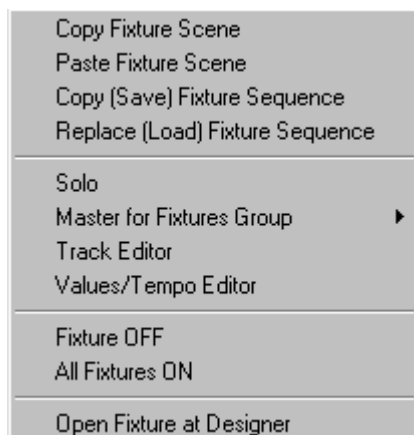
You can reach the menu by pressing the right mouse button on the heading of the chosen light fixture in the «Monitor» or «Sliders» tab window or on an icon in the «Plan» tab window.

That allows you to provide various operations:

1. To copy the attributes of the single selected light fixture at the current SCENE into the buffer, please choose «Copy Fixture Scene» command of the pop-up menu. This command is disabled for «red» fixtures (see point C9.1).

2. To replace the copied attributes of the single selected light fixture into the current SCENE, choose «Paste Fixture Scene» from the pop-up menu. This command is disabled for «red» fixtures (see point C9.1).

3. To copy the behavior of one selected light fixture within the current SEQUENCE (i.e. all fixture's attributes in a chosen range SCENE by SCENE within the current SEQUENCE) into the buffer, you have to choose ⌷Copy (Save) Fixture Sequence⌷ command of the pop-up menu. This command is disabled for «red» fixtures (see point C9.1)

Then you see the next dialog:

DMX Wizard 512

Copy SEQUENCE state
of fixture | OK

From Scene [1] | Save to file

To Scene [42] | Cancel
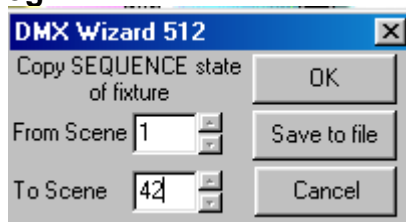
This dialog allows you also to save the selected fixture's behavior within the defined SCENE range of SEQUENCE into a file with *.sqd extension. To carry out this action press «Save to file» ⌷Save to file⌷ button.

You also have possibility to define the first (⌷From Scene [2]⌷ option) and the last (⌷To Scene [40]⌷ option) SCENE of the range being copied within the SEQUENCE, which is active at the moment.

4. To replace the behavior of one selected light fixture within some SEQUENCE for the behavior previously copied to the buffer. To carry out this action you have to ⌷Replace (Load) Fixture Sequence⌷ command of the pop-up menu. Please note, that no

additional SCENE'S will appear in the SEQUENCE, paste operations are used here only in replacement mode. This command is disabled for «red» fixtures (see point C9.1)

After choosing the command you can see next dialog:
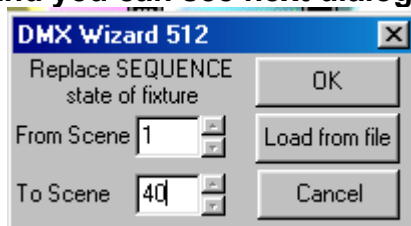
This dialog allows you also to replace the selected fixture's behavior within the defined SCENE range of SEQUENCE with behavior loaded from a file with *.sqd extension. To carry out this action press «Load from file» [Load from file] button. After that you can see the next dialog
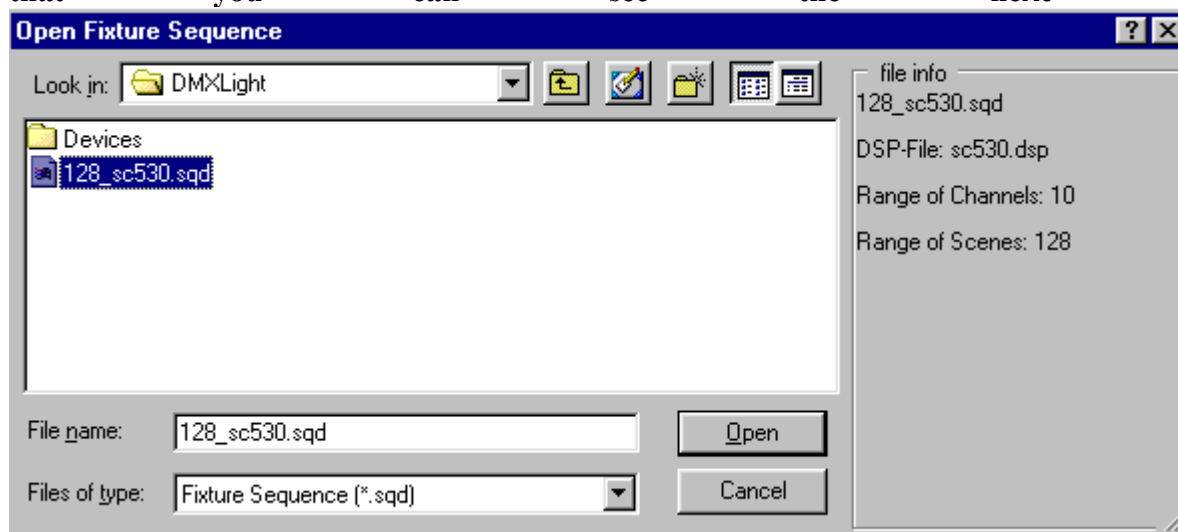
. In the right part of this dialog you can see information about the chosen file of fixture SEQUENCE: the name of file, quantity of SCENES and quantity of channels.

You also have possibility to define the first ([From Scene 2] option) and the last ([To Scene 40] option) SCENE of the fixture SEQUENCE range having been copied, it means, that in some cases we don't need to replace for all the copied or the loaded range, and so we can make the limitation.

5. To switch the light fixture into «Solo» mode you have to choose «Solo» command of the pop-up menu. In this case all light fixtures except the selected one are switched off («BlackOuted»).

6. To select all identical light fixtures for the control from the one common control panel. All light fixtures having the same kind of control panel can be assigned to «Red Master» simultaneously. For that please choose «Master for Fixture Group» option of the pop-up menu
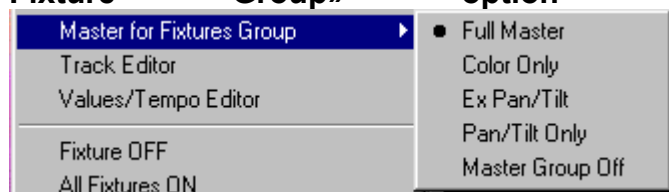
 and some of its sub-options (See «Possible master modes» chapter C9).

7. To display the Track Editor (see chapter C20) if the device has Pan/Tilt-facility, you have to choose «Track Editor» option (it is active only for fixtures having

Pan/Tilt) of the pop-up menu. The «Track Editor» will open with the chosen light fixture set as active.

8. To display the <u>Values/Tempo Editor (see chapter C19</u>) for editing of the SEQUENCE Tempo track or for executing of some copy/paste operations in digital-graphic view, you have to choose «Values/Tempo Editor» option of the pop-up menu.

9. To disconnect the selected device by setting all its channels to «Black Out» state and making it independent of the following playback of the SHOW, you have to choose «Fixture OFF» option of the pop-up menu. To restore all fixtures disabled with the help of «Fixture OFF» command, choose «All Fixtures ON» command.

11. Additional toolbar

  At the top of the main window, bellow the main menu and main bar, you can see a ruler with buttons, which can open various screens. All this buttons are dubbed with commands from the «View» menu.

«Monitor», «Sliders» and «Plan» are names of alternative fields, which are left lower parts of main window

«Monitor» button - opens a field, which shows fixtures' user names and their channel values, which can be edited (see details in chapter C6).

«Sliders» button - opens a field, which shows List of fixtures' user names and field with sliders, which can control DMX channels. (see details in chapter C6).

«Plan» button - opens a field, which shows user's map with fixtures' icons and user names, which can control DMX channels. (see details in chapter C6).

«V/T Editor» button - opens a field replacing all lower part of the main window, which has 2 main modes-editors, DMX Value editor which can change DMX channels values, and Tempo-Track editor which can change intervals between scenes (see details in chapter C19).
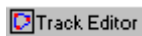
«Track Editor» button - opens a high priority window with Beam Track Editor, managing a beam's trajectory as a geometric figure (see details in chapter C20).

«Media Player» button - opens and closes a high priority window with universal player for media files (see details in chapter C14).

«Play List» button - opens and closes a high priority window with Time Play List allowing to prepare various actions at exact moments of the show (see details in chapter C13).

«Sequence List» button - opens and closes a high priority window with the List, managing SEQUENCES' order (see details in chapter C7).

«Multi Sequence Player» button - opens and closes a field replacing all higher right part of the main window with 12 players performing various SEQUENCES simultaneously (see details in chapter C19).

«Master Off» Button can be seen only when some master modes are active (see   details   in   chapter   C9).

12. Multi-Sequence Player

If you want to mix special SEQUENCES controlling various features of your light equipment, you need to use Multi-Sequence player. Some users also like to prepare SEQUENCES for each kind of light fixture separately and then mix them in Multi-Sequence mode. To recall Multi-Sequence player you have to choose «Multi-Sequence Player» option of the «View» menu or press ▦ button from additional toolbar ♪ ▤ ▤ ▦ or press the Hot key button («F8» default) on the keyboard. From this moment all editing functions are disabled. Before you start operations with Multi-Sequence player, we would like to give some advises:

1. For trying Multi-Sequence player use very simple SEQUENCES first, for example you can create SEQUENCE changing colors in your light fixtures, keeping in mind, that all unused channels' values are set to zero. Then you can take any other SEQUENCES, in which all channels are used ordinary way, and preset all the colored channels to zero. Mixing of these last SEQUENCES with the color ones will give you the best example of Multi-Sequence player usefulness.

2. Managing SEQUENCES in Multi-Sequence player.

Every player of the Multi-sequence player always contains the list of all SEQUENCES of your current SHOW. When you open Multi-Sequence player first time since creating of a new show, you can see the name of SEQUENCE number 1 in every of 12 drop down lists. Anyway only ACTIVE SEQUENCE, which you see in the list window, is to be played in every definite player. To make the sequence ACTIVE you have to choose its name from the drop down list. If you push «Play» ▶ button or the Hot key («F12» default), when all players contain the same SEQUENCE active, you will see mostly no difference, like if you use ordinary playing with «List of Sequences» (see chapter C7). To feel the difference, try to choose various sequences from the drop down lists. Then switch activation button «▣●1̲» if necessary to activate proper players. Activation button circle is white ▣◻1̲ when the player is active.

3. Possible actions in the Multi-Sequence mode:

You can choose active SEQUENCES.

You can switch players «On» and «Off». All players «Off» mean «BlackOut».

You can change «Cycle Sequence» «🔄» option, uncycled means playing SEQUENCE one time and stop on the last scene.

You can change synchronization mode. «Main» Main, «Tempo Track» T/Tr and «External» Ext (from audio beat-detector). In «Main» synchro you can change bpm (tempo) value manually (tapping is not available).

You can use «BlackOut» and «Favorite» buttons.

Note: Changing ACTIVE sequence when Stop doesn't cause active changes of the light picture till Play **is activated.**

To exit from «Multi-Sequence Player» you have to repeat once more one of actions, which you provided for opening it.

The main principle of sequence mixing provides choosing the max DMX signal value from 12 (or less) same mixing channels of ACTIVE sequences.

Note: At this mode «Full MIDI control» is not supported, you can change only active sequence number in chosen active player with using MIDI «Note On» directive (see <u>Synchronization, MIDI and Hardware chapter C15</u>).

<u>See also chapter F «Problems».</u>

13.Play List

You need Play List for creating highly detailed and complicated show synchronized with internal timer. To open Play List window you have to choose ⌈Play List   F6⌉ option from the «View» menu or press 🔲 button from additional toolbar 🎵🔲📊📋 or press hot key (default «F6»). After that you will see an active window, which, when opened first time, looks the next way:
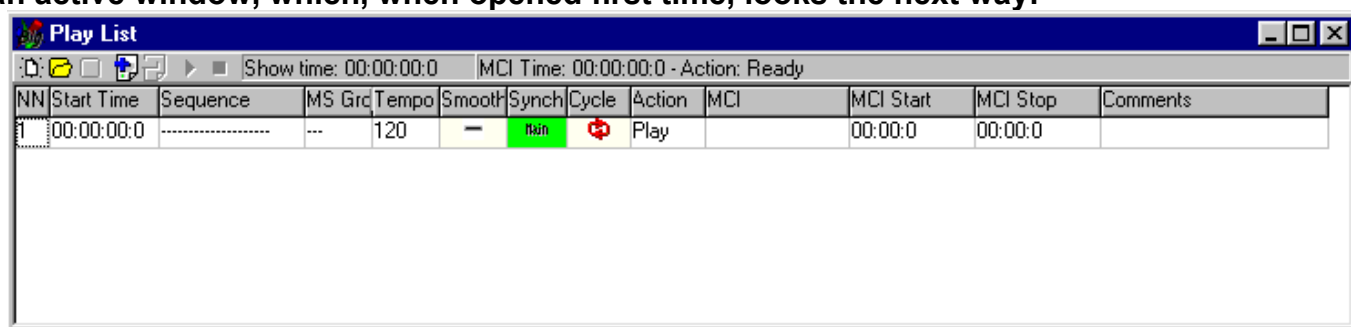
Play List is a sequence of command strings which are numbered in order and linked to time values which are exposed in ⌈Start Time | 10:07:23:1⌉ field.

To make new string press «Add item» 🔷 button.

To delete string which is active at the moment press «Remove item» 🔷 button, which can be enabled when you have not less than 2 strings.

Play List can be saved on disk with the help of «Save Play List» 🔷 button. To start creating of new Play List press «New Play List» 🔷 button.

Saved Play Lists (files with *.pgl extensions) can be opened with the help of «Open Play List» 🔷 button. In 4.11 version Play List is not included into the SHOW file. Play List keeps the same even if you open various SHOWS (including creating a new SHOW), if you don't close the program. Don't forget to save your Play List on disk before closing the program.

Play List strings are always composed in order of start time progression. To start playing from active string, press ▶ button. To stop the performance press ■ button. Active string which is at the process of execution is highlighted with a color ⌈3 | 00:00:23:5 | RED TRACK⌉.

1. Start Time Field. ⌈Start Time | 10:07:23:1⌉

It is important to know that Play List is starting right when button «Play» ▶ is pressed. Internal time is counting from the value exposed in start time field

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from the first string or active string. If some string is active, after pressing **button, time starts running from the value exposed in that string, and the action chosen in that string starts being provided. Strings are sorted automatically so that later time has bigger order number.**
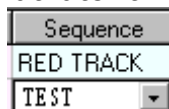
2. Sequence Field.

   Just choose necessary SEQUENCE from the drop down list. If you don't need any SEQUENCE play during this string action, keep or choose field

3.Multi-Sequence player number field.

   When the numbers from 1 till 12 are chosen from drop down list, this option causes Multi-Sequence Player to open and start with the corresponding player enabled. This player will contain the SEQUENCE chosen in the Sequence Field, and this player will be active _(see chapter C12)_**. If no number is chosen (or empty filed** **was chosen) the Multi-Sequence Player will be not activated. It even becomes closed if it was open before.**

   If you need to start a few players (of the Multi-Sequence Player) at the same time you need to create a few strings with the same time.

4. Tempo Field.

   Has the same function as usual. In software version 4.11 the main Tempo Field **on the Main Panel can correct tempo of SEQUENCE started from the Play List right while its performance. It can be done by changing of**

value in tempo field as well as tapping on **button.**
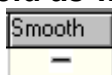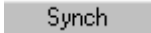
5. Smooth Field.

   Enables/Disables «Smooth» command (analog of «Crossfade» function) during the string action, like as if you do it by yourself from «Settings» - «Synch and Hardware» (see chapter C15) menu.
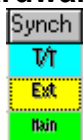
6. Synch Field.

   Here you can choose the same types of synchronization as usual, like if you use «Synchronization» button **(see chapter C4). Is used in ordinary and Multi-Sequence players. You need this field very much, for example, if you plan to start midi file containing light show data controlling SCENES via virtual midi driver. In this case don't forget to take a look at** **and** **tabs of «Synch and Hardware» dialog of «Settings» menu, because you probably may need to check all involved parameters (see chapter C15).**


7. Cycle Field.

   Is used in ordinary and Multi-Sequence players. Uncycled SEQUENCE just stops on the last SCENE. In the version 4.11 there is no way to start next string except for timing (or «Goto» command). It means that the software can not

recognize the end of uncycled SEQUENCE and logical transition from one SEQUENCE to another can not take place without involving of the timer.
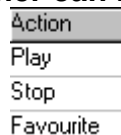
8. Action Field.

Usually this field is used with Play «Play» option, but some other options can be needed sometime. In this version the quantity of possible options is not so big, but we are working on it. Make string with «End» End option to stop timer. Make string with «Goto NN» Goto NN option to cycle part of Play List (Enter low string number). Choose «Stop» option, if you need only first SCENE of the SEQUENCE to be exposed. Options «BlackOut» and «Favourite» are equal to pressing of the correspondent buttons in the main window.
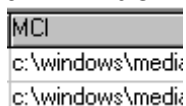
9. Media Player MCI Field.

Use this field to start playing some media files (4.11 supports .mid, .wav files only). Media file can start and stop from some special marks between its own start and finish. These marks can be pointed as a time of media file beginning in MCI Start 00:00:0 and ending in MCI Stop 00:00:1 fields.

10. Comments Field.

Just describe the current string action in this field.

14. Media Player.

Media Player can be recalled from the «View» menu or from the Hot key (default F5). Also - from the additional toolbar , button . It acts the same way as standard Windows Media Player (Mplayer.exe). It can be also background activated from the Play List (see chapter C13).

15. Synchronization, MIDI and Hardware

When you choose «Synch and Hardware» option from «Settings» menu or make right click on button you can see the following screen with various tabs.
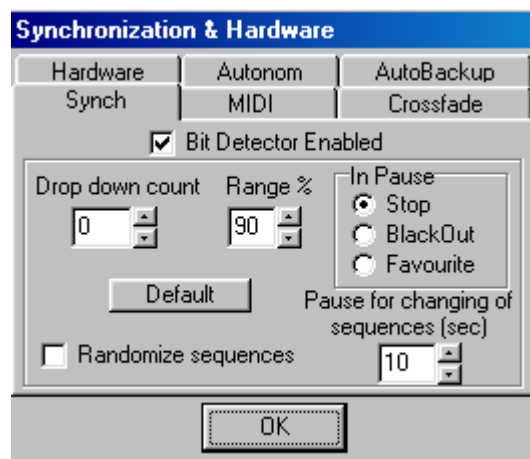
1)The «Synch» tab. It describes various synchronization parameters, including those necessary for the controller box autonomous job.

All parameters below this option are active only if the option is chosen and «External Synch» button is yellow. They are also important when you are preparing the controller box for autonomous job (<u>see point C15.5</u>):

aa) Option **«Bit Detector Enabled».** It turns on and off the possibility of work with external sound source. It also switches 2 different programs (sound activated and Tempo Track activated) which can be loaded into flash memory of the controller box (<u>see point C15.5</u>). If you plan to work with U18 Control Board (<u>see chapter E</u>) or, for example, to install the controller box for autonomous job with light fixtures at shop-windows, uncheck this option on the tab, so that your flashrom controller will be programmed for tempo track SHOW.

a) parameter determines how many SCENES will be played after losing synchronization from an audio-source. Parameter determines the range of available expected tempos on relation to the chosen playback tempo displayed at the tempo window of the playback tool-bar. It means at setting «Drop down count» = 1 and «Range %» = 90% the SCENES will be changed with any detected beat even with very non-stable tempo, and at setting «Drop down count» = 100 and «Range %» = 5 % they will follow each other not depending on the beat - detector, but in accordance to preset playback tempo (look at your tempo window).
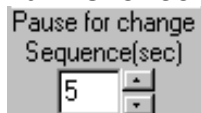
b) «In Pause» options.

«In Pause» menu along with the "Pause for Change" (<u>see point d below</u>) option allow to set the light fixtures behavior during long period when no any signal is coming from the external beat - detector (when there are some pauses between sound tracks). Accordingly after expiration of "Pause for Change" time the light fixtures are switched to a "Black Out" state or "Favorite" state or just pause (if «BlackOut» or «Favorite» or «Stop» options are chosen).

c) **option.**

Selecting "Randomize sequences" option provides a random change of SEQUENCES in the SHOW after every sound pause while playback. If this option is not active, every time when critical pause (see point d) is detected the SEQUENCE will be replaced by the next.

If «Randomize Sequence» option is active, the computer makes decision himself about the next SEQUENCE number after receiving first beat while being in audio-pause mode. This allows the program control the lighting on its own with no intervention from a light jockey. The major importance of these options can be noted when using the controller box separately from computer.

d) Minimum silence time, which can be recognized as a pause can be chosen in **window.**

2) The «MIDI» tab.
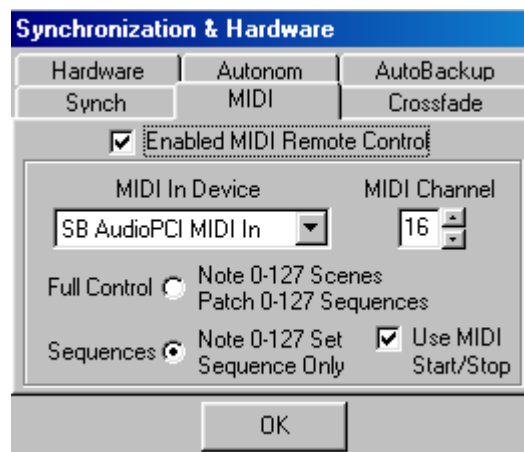
a) «Enable MIDI Remote Control» option **.**
Choosing option "Enable MIDI Remote Control" allows assigning the control of switching sequences and scenes from a MIDI source. All parameters indicated below this option are actual only if the option is chosen, and «External Synch» **button is yellow.**
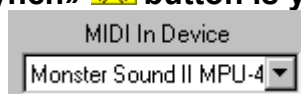
b) «MIDI in Device» **window. Gives a choice possibility only if the option** **is chosen. Use this window to choose the device from which you will receive MIDI signals. The most popular device is a MIDI keyboard attached to some PC MIDI port. But some advanced users can use PC sequencer programs (like Cubase, Logic, Cakewalk etc.) for creating combined music and light shows. To do that you have to install virtual MIDI driver "MIDI Router" by "Sonic Foundry". You can download this driver on http://www.sonicfoundry.com/Download/default.asp. Then you have to address one of MIDI tracks of your sequencer to «X Sonic Foundry MIDI Router» input, and use this track for recalling of necessary scenes synchronously to the music (or for starting sequences). In this tab, in «MIDI in Device» window you have to choose «X Sonic Foundry MIDI Router».**
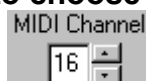
**c) «MIDI channel» window** **. Use this window for selecting the**

controlling channel of your MIDI device. This channel will be used for recording of SCENES or SEQUENCES depending on «Full control» option (<u>see point d</u>).

d) "Full control" option . The most effective when used along with a MIDI Sequencer. When this option is selected all play modes are canceled, i.e. show is in stop mode. Reception of the MIDI instruction "Note On" (some note was «played») on the selected MIDI channel will result in a change from the current SCENE to a SCENE with number within the SEQUENCE, corresponding to number of the note (e. d the note C0 will recall SCENE 1, note C1 will recall SCENE 2, and so on). Reception of the MIDI instruction "Program Change" (Patch) will result in change from the current SEQUENCE to the SEQUENCE with number corresponding to number of the program (patch) in the midi instruction. If there is not any "Note On" instruction simultaneously, the first SCENE of the SEQUENCE is acting. Thus, in «Full control» mode, using an external MIDI keyboard (or MIDI sequencer) it is possible to recall the scenes and sequences (if that keyboard controls "Program Change") in stop mode. It have to be obviously clear that «Crossfade» function (<u>see point C15.3</u>) can not be active in «Full control» mode, because the software can not know, when the next SCENE is expected.

e) "Sequences" option . When this option is selected all play modes are enabled, i.e. show is going on as well as usual. Buttons "Synch" (any color) , "Play" and "Stop" have same results as without MIDI Remote Control. Reception of the MIDI instruction "Note On" on the selected MIDI channel will result in a change from the current SEQUENCE to the SEQUENCE with number corresponding to number of the Note (e.d. the note C0 will recall SECUENCE 1). Any time after changing, the new SEQUENCE position is «SCENE 1».

3. The «Crossfade» tab.
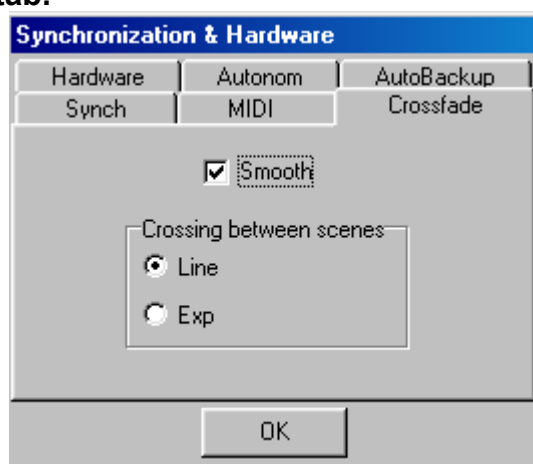
«Smooth» option (equal to «Crossfade» function) enables the mode of smooth switching (crossfading) between SCENES. Additional conditions of the «Smooth» mode (choice of channels for crossfading) can be defined when creating or editing of the light fixture control panel (<u>see chapter D «Control Panel Designer»</u>).

«Smooth» function is strongly necessary for cheap scanners, applied on Pan/Tilt channels forcing a beam of the scan to move smoothly (cheap

scanners have no speed control). Choosing «Line» option enables LINEAR crossfading from SCENE to SCENE. Choosing «Exp» option enables EXPONENTIAL cross fading, which means growing up of scanners' speeds when new SCENE is approaching. It is not so possible to catch the difference between «Line» and «Exp» options if you have very slow scanners.

Anyway «Smooth» option can be applied to any DMX channel of a light fixture, for example to a dimmer channel, focus, iris and so on. But you have to define it preliminary with the assistance of the «Control Panel Designer» (see chapter D) capabilities.

4. «Hardware» tab.
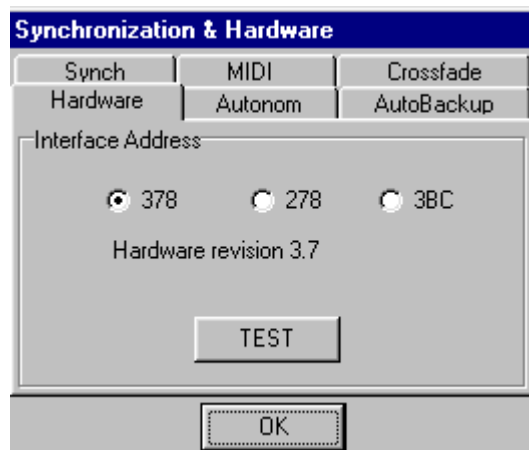
It allows you to set base address of the printer port, to which the interface box is connected. After setting address you should press «TEST» button for updating data and testing the connection between your computer and interface. After this procedure all DMX channels of the interface are reset to "0" (physical Black Out). For restoring data on the channels please press button «Refresh Scene» (Hot keys default «Ctrl» + «R») or buttons

.
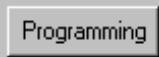
5. The «Autonom» tab.
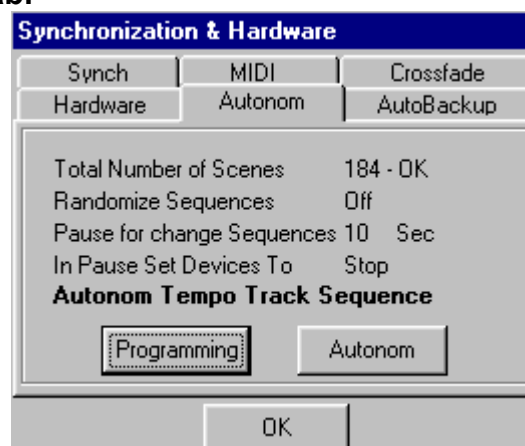
This tab has to be referred to for programming Flash-memory of the controller version 3.5 and later. It will allow a possibility to use the box without the computer with synchronization from an audio source or (for hardware versions 3.7 and higher) from the tempo-track created on your PC. The order of

SEQUENCES and SCENES and change algorithms are also to be prepared and loaded into Flash-memory from your computer.

Press «Programming» button [Programming] to load your show into the controller box. Previously loaded show will be erased automatically. Don't forget, that this button is accessible and visible only when the controller box is connected to your PC, while the box has hardware version 3.5 and higher. In opposite case you will see the next description on the «Autonomus» tab.
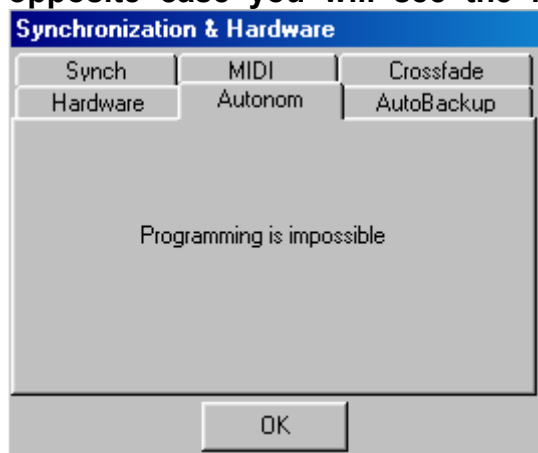
If the box is connected properly you can see all previously defined details at the «Autonom» tab. But to define them you need to open the «Synch» tab (<u>see point C15.1</u>).

After loading, you can switch off and disconnect the computer from controller (it is better to turn off the power of the box and the power of all DMX-fixtures while disconnecting). The controller will play SHOW automatically in accordance with the selected parameters. It is very important, which options you have chosen in the «Synch» tab.

The main characteristics of loaded show (hardware version 3.5 or higher):

Quantity of sequences	up to 100
Quantity of scenes in sequence	up to 255
Total capacity	2000 scenes
Number of reprogramming cycles	more than 10000
Time of programming 2000 scenes	~ 7 minutes(0.2 sec/scene)
Order of playing back sequences	random, sequential
The length of audio pause detected	2...120 sec
Action in pause	stop, blackout, favorite

The "Autonom" [Autonom] button allows you to set the controller into testing autonomous mode. In the testing mode the first received audio beat starts up the random numbers generator which will cause random order of SEQUENCES.

ATTENTION,

For users of hardware version 3.7 and later (flashrom version designed from January 2000)

Autonom Sequence Playing from Tempo Track.

If you uncheck «Bit Detector Enabled» ☐ Bit Detector Enabled check box in the «Synch» tab you can see the new bold phrase in the «Autonom» tab:

In Pause Set Devices To   Stop
Autonom Tempo Track Sequence

It means that the controller will play sequences according the tempo track (See chapter C19). The show will be cycled, i.e. the last SCENE of the last SEQUENCE will be followed by the first SCENE of the first SEQUENCE an so on.

This way of preparing of SHOW is also necessary for operation with U18 control board (**see chapter E**).

6. «AutoBackup» tab.
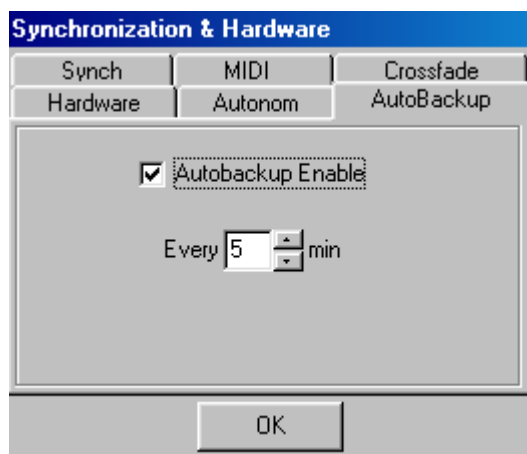
On this tab you can enable creating of a special file, named «$AutoBak.dmx». Software will save a current show into this file according to established time interval. In an abnormal situation you can restore results of editing from this file.

16. The files and settings toolbar

All these buttons' commands are duplicated with commands from «Files», «Scenes» or «Settings» menu.

The «New Show» button (equal to «New Show» command from «Show» menu) starts an empty new SHOW, closing the current SHOW. Pressing this button, you immediately open **DMX channels setup** window with the DMX field the same as in the previous show. A Hot key can be assigned by user (Default «None»).

The «Load Show» button (equal to «Load Show» command from «Show» menu) starts a dialog of loading of one of previously created SHOWS from the disk. Hot key available (default «Ctrl» + «L»).

During playing back of the SHOW (in «Play» mode) you are allowed to load another SHOW file without interrupt in playing, but in this case the DMX configuration of the loaded show devices will not be checked. It will load only the SEQUENCES and SCENES. Normal complete loading is possible only from «Stop» mode.

The «Save Show» button (equal to «Save SHOW» command from «Show» menu) saves the current SHOW to the file on your disk with the old name (We mean

that you have opened the current SHOW from that file). Hot key available (default «Ctrl» + «S»). If you save some new SHOW first time, this button's action is the same as for button «Save Show as..» (see description below).

The «Save Show as..» 🔃 button (equal to «Save SHOW As..» command from «Show» menu) saves current SHOW to a new named file on your disk. You have to choose this button for renaming SHOW, or for giving to SHOW file original name first time. Do it to avoid deleting of previously designed SHOWS.

The «DMX channels» 🔧 button (equal to «DMX Channels» command from «Settings» menu) calls on a window **DMX channels setup** for <u>setting of DMX channels (see chapter C22)</u> and assignment of light fixtures, i.e. the window, where you describe which light fixtures on which channels are, where you define their names and reverse details. Hot key can be assigned by user (Default «None»).

«Control Panel Designer» 🖼 button (equal to «Control Panel Designer» command from the «Settings» menu and «Fixtures Panel Editor» from the «View» and «Fixtures» menus) recalls the software - creator of user's control panels for DMX fixtures (<u>see chapter D</u>).

«Refresh Scene» 🖌 button is placed to the right of SHOW name window. Its destination was described earlier in chapter C3 «Creating a SEQUENCE». It cancels all changes made in the current SCENE if you haven't pressed any other buttons after this changes, such buttons as ⬅➡ etc. Hot key available (default «Ctrl» + «R»).

17. The "Black Out" button

The «BlackOut» **Black Out** button (equal to «Black Out» option from «Operation» menu) switches all light fixtures «off», according to settings made in their control panels. The SCENE recalled with this button usually is aimed to turn off all possible lights, but user is free to determine it for every light fixture «personally» (<u>see chapter D</u>) This button also stops playing back SHOW if it is playing. Hot Key is available (default «F11»).

If you need to turn some separate light fixture into the «BlackOut» mode, you have to press a small button 🅱 in the top left of the fixture's control panel.
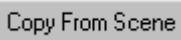
18. The «Favorite» button

The «Favorite» **Favourite** (is equal to «Favorite» option from the «Scenes» menu) button recalls one of special SCENES which we name «Favorites». This button stops playing back SHOW (temporary pause on the current SCENE). While the button is gray, it means that no any SCENE is assigned to it. If you click by mouse on the gray button it will have no effect. To activate the button and to make it green, it is necessary to provide the next actions:
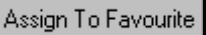
Variant 1. Right click on the «Favorite» button and choose «Select» command
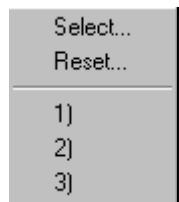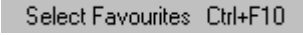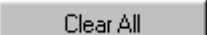
**from the pop-up menu** **. Then you will see the next dialog**
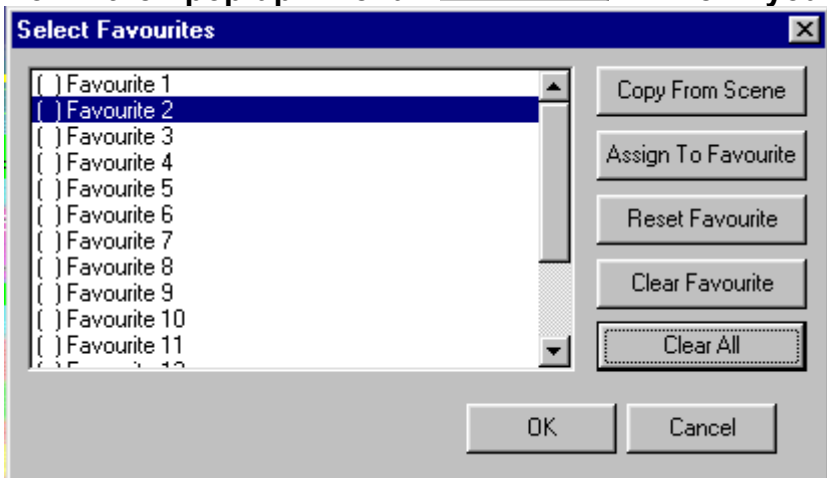
. If you have in your SHOW some SCENES which you want to choose as favorites, you can select them without closing the dialog, the same way as ordinarily in «Stop» mode. Then you need to choose necessary string (Favourite 1, Favourite 2, ...) and press **button. Doing this we are filling one of 16 cells with various SCENES which in 4.11 version use to be dependent on their «sisters» from SHOW (don't erase source SCENES accidentally, otherwise the next SCENE will take place in correspondent Favourite cell; the best way is to make last SEQUENCE consisting only of favourite SCENES).**

Now you need to assign some numbered Favourite to a main Favourite. For that, just press **button while correspondent string is chosen. Thus, if we will assign «Favourite 2» to the main Favourite and then press «Close» button, we'll be back in main window and Favourite button will look as** **.**

Variant 2. Choose **command from «Operation» menu or press correspondent Hot key (Ctrl + F10 as default). The next steps are the same as in Variant 1.**

You can use **or** **buttons to erase information from one or from all cells.**

Variant 3. If you have Favourite 1, Favourite 2 and so on, already assigned to some SCENES, you can quickly assign the main Favourite button the next way: make right click on Favourite button, and then make left click on the correspondent
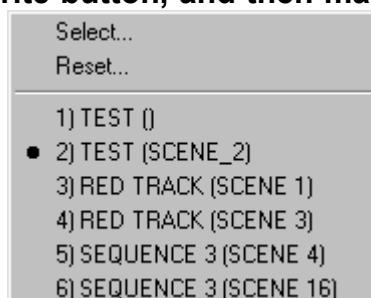

string of the pop-up menu **.**

Now you have chosen the «Favorite». At any moment of SHOW, press this button **, which is green now, to pause SHOW and have this SCENE immediately. Please note, that you will see no any changes at PC display (including**

control panel) after recalling of «Favorite» SCENE (the result on display will be the same as after pressing «Stop» button). Physically all light fixtures will show «Favorite» SCENE, but the PC display will show you that you are in «Stop» mode at some current SCENE. Hot Key is available (default «F10»).

19. Values/Tempo Editor
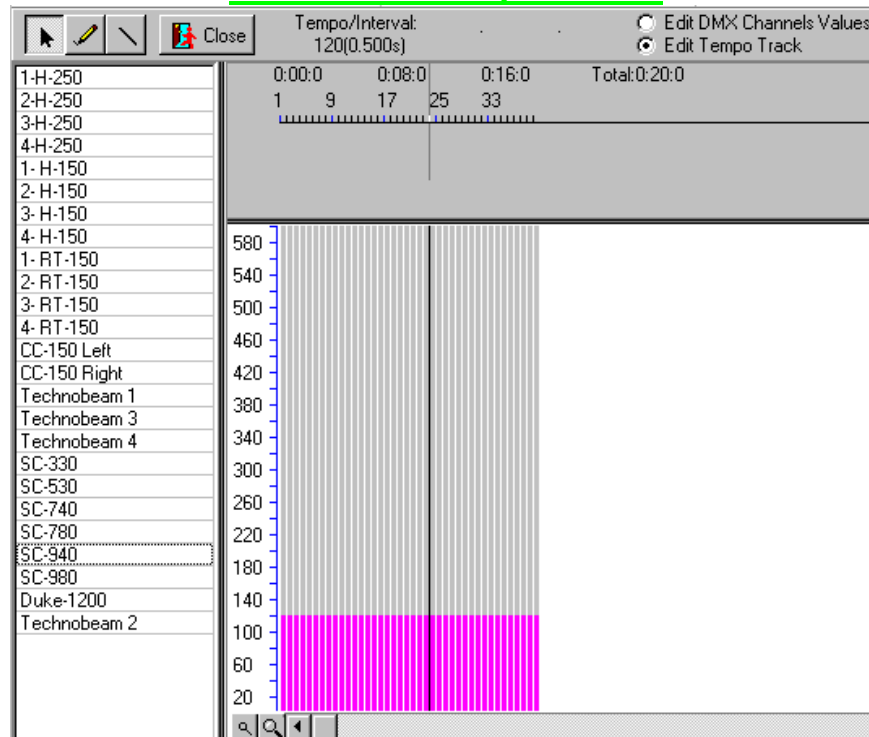
Values/Tempo Editor is intended for editing the information in a digital-graphic implementation. Editing is available only in the limits of the current SEQUENCE. The editor can be opened with «V/T Editor» command from the «View» menu or with V/T Editor button from the additional toolbar.

The editor consists of two separate editors: "DMX Values Editor" and "Tempo Track Editor". To toggle between those two editors you have to click corresponding check boxes Edit DMX Channels Values / Edit Tempo Track on the context toolbar.

DMX values editor (choose option


Edit DMX Channels Values).
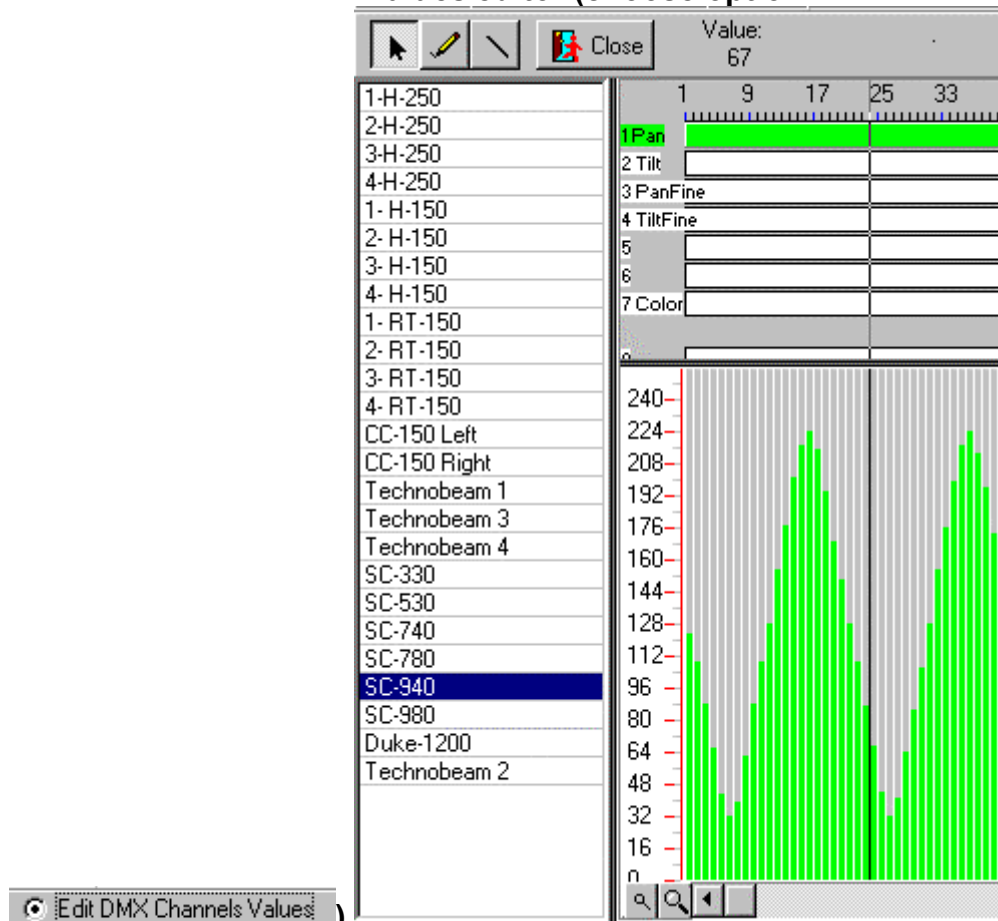
In the "DMX Values Editor" it is possible to edit values of DMX channels exposed graphically as columns. Each column reflects the selected channel's DMX value in some SCENE. The active SCENE is marked with a big cursor, the active

channel value in the active SCENE is exposed on the left above the ruler
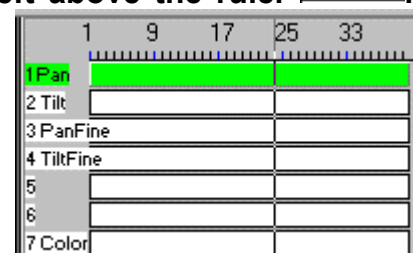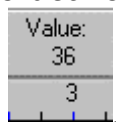
You can choose active channel in the channel screen

(active is green) as well as you can choose active light fixture on the fixture's
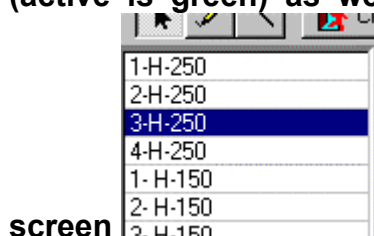
screen .

Two editing tools are accessible: a pencil and a ruler . You can select the required tool from the toolbar. You can use the pencil for pointing or drawing on the column field. The value position of the pencil is exposed on the right above the
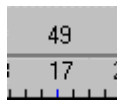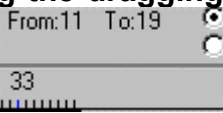
SCENE ruler . Ruler works like a «cut line». You need to hold left mouse button while clicking on the first point and release it while clicking on the second point, as the result you will see a range of columns growing or reducing linearly.

In this mode copying/pasting is also accessible. It is possible to pick up the information for copying by two ways:

1.

a) Choose a part of the active light fixture sequence, including all the light fixture channels.

Using the pointer tool select a range of SCENE numbers using mouse

drag on the scene number ruler . During the dragging

the chosen range data ix exposed on the right above the ruler .The selected range is dark now. Then click the right mouse button on the selected range.

b) Choose the item "Copy" from the pop-up menu . Then you

can see the dialog determining copying parameters .

2.

a) The other way allows involving only some range of channels and SCENEs, which are next to each other, into copying operations. To do this, select the


channel value tracks required by mouse drugging . You choose a range of SCENES at the same moment. The selected range of SCENES and tracks is dark now. Right click on the range.

b) Choose «Copy». In all other operations the two methods above are identical.

After copying is made you can paste (it means «replace») this range from the marker point. For paste it is necessary to set a marker on the required SCENE number and to choose active channel (the copy data will not be pasted on the channels with number less than number of active channel). Now you have to right-click anywhere on the ruler. Then you can see the next dialog window
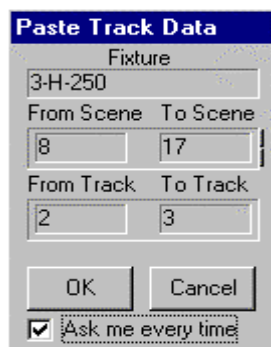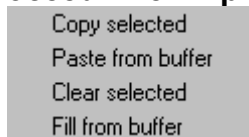
, at which you can't define anything, only press «Ok» or «Cancel»

The copy/paste commands are inaccessible while playing a SHOW.

In this editor the button «Refresh Scene» (Hot keys default «Ctrl» + «R») works as one-level undo.
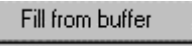
Clearing range.

If you proceed like in p. «a» then you can choose «Clear Selected» from the


pop-up menu . All channel values in the selected range will be set to 0.

Filling range.

The information kept in the buffer after copying (<u>see point a</u>) can be used like element pattern. If you choose range bigger than copied before you can fill it with multiplied patterns copied just previously. For that you have to choose command from the pop-up menu.
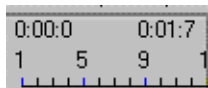
Tempo Track Editor (choose option)

Tempo track is very interesting synchro option, which can be edited and memorized for every SEQUENCE. If you select blue color of the synchro button , playing back will follow the edited SCENE times.
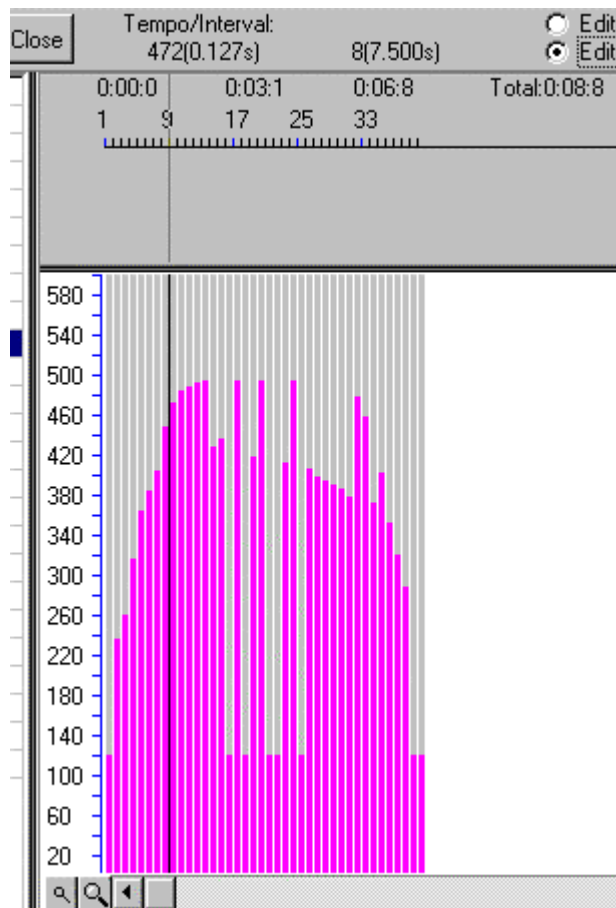
The first different feature, which you see after opening, is total SEQUENCE time exposed on the right side of the SCENE ruler Total:0:20:0 . Pencil and ruler tools are also accessible, but on the right above the SCENE ruler, when using these tools, the tempo v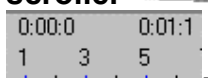alue and the time value in the possible application point is exposed 8(7.500s) 0:06:8 . All operations with pencil and ruler are identical to the same operations in DMX values editor. Of course, selecting a light fixture has no effect, because tempos are the same for all light fixtures and channels. On the left above the SCENE ruler you can see tempo value for the SCENE, on which the big cursor is positioned. Near between the brackets you can see also the time duration between the current SCENE and the next SCENE Tempo/Interval: 120(0.500s) (interval), which is, of course, inversely proportional to tempo value.

You can see time positions above some SCENE numbers on the SCENE ruler 0:00:0 0:01:7 1 5 9 1 . The first scene of time position is always zero. On the picture you can see that a next nearest time position is exposed above the SCENE 9. But if you press one time on big magnifying glass on the right or on the left of the bottom scroller , then the nearest time position will be under the SCENE 5 0:00:0 0:01:1 1 3 5 , i.e. the wider is SCENE ruler, the more time positions you see.

You can't undo changes to the Tempo-track. SCENE range choosing, copying and pasting is disabled.
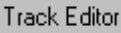
20. Beam Track Editor

Track editor is intended for editing of the light fixtures' beam positions. It can be applied only for those light fixtures that have Pan/Tilt control. Track editor window can be recalled one of 3 ways:

1. By pressing «Track Editor» button [Track Editor] on the additional toolbar below the «Stop» button. If the momentary active fixture doesn't have the controlled beam facility and its control panel doesn't have Pan/Tilt field,
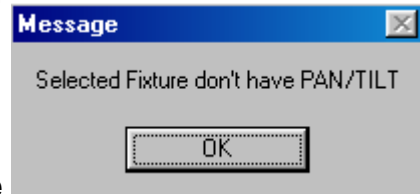
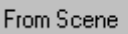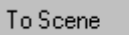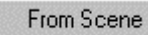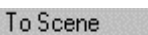pressing this button will cause the next note [Message: Selected Fixture don't have PAN/TILT OK].

2. First right-click on the fixture's icon or header with mouse, then choose «Track Editor» option [Track Editor] from the pop-up menu. This option is not active for fixtures without Pan/Tilt field.

3. While you are in the Values/Tempo editor, right click on the fixture's name and then confirm «Track Editor» option.

4. From the «Fixtures» and «View» menus.

Once you have opened track editor you can see the active fixture's beam positions in all SCENES of the current SEQUENCE (or in selected range of SCENES) as a light fixture's beam movement trajectory.
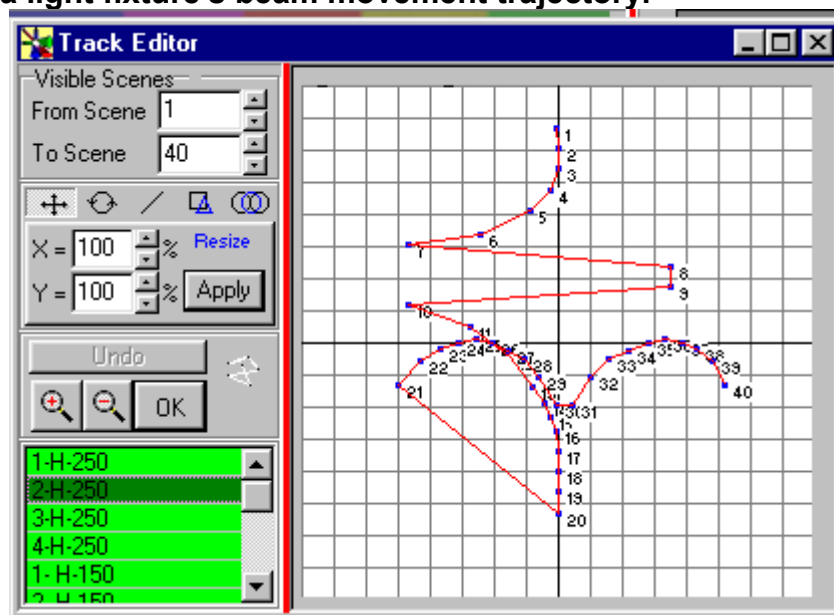
SCENE range can be changed in «From Scene» [From Scene 1] and «To Scene» [To Scene 40] windows. It is also possible to right click on the corresponding numbered SCENE point and select [From Scene] or [To Scene]
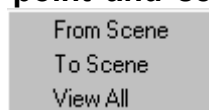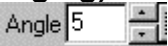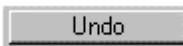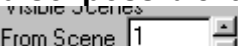
command from the pop-up menu [From Scene / To Scene / View All]. You can see that only points from this range are visible (visible track). Choose [View All] option of the pop-up menu to restore and make visible the complete range of SCENES from first to the last. You can move any point (light fixture beam position) by selecting the appropriate one on the field and moving the cursor while holding left

mouse button. You can also select a group of positions by selecting with mouse by dragging a square zone containing them with mouse and then to click on this zone once more and to move it into a new position while holding left button.
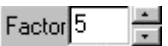
Press «Resize» button ⊕ to resize the whole visible beam track
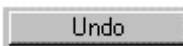
horizontally, vertically or both (changing X, Y parameters [X = 100 % Resize / Y = 100 % Apply] and then

pressing [Apply] button). [Undo] button is used to cancel all changes in trajectory since the moment of opening of the editor window.

Press «Rotate/Mirror» button ↻ to execute rotation or reflect operations applied for the whole visible beam track. Buttons ▣ and ▣ are for vertical and horizontal mirror transformations relatively to the center of the track field (when higher and lower or left and right points are exchanging). To provide whole visible

beam track rotation to the angle defined in the [Angle 5] window, you have to

press [Apply] button. Possible angle range is from -180 to 180 degrees. To avoid any confusion we have to warn you that many times applying of the rotation will lead to the common distortion of the beam trajectory because of multiplying of mistakes. [Undo] button is used to cancel all changes in trajectory since the moment of opening of the editor window.

It is also possible to straighten the part of visible trajectory (i.e. the part

defined in [From Scene 1] and [To Scene 40] windows) by pressing the button

«Linearize» ╱ and then [Apply]. [Undo] button is, as always, used to cancel all changes in trajectory since the moment of opening of the editor window.
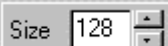
Press «Polygon» button ◳ to achieve a triangle (vertex 3), a square (vertex 4), a pentagon (vertex 5), and a hexagon (vertex 6). You can define «size» parameter

in [Size 128] window if necessary. It can be changed from 4 to 254. [Apply] button

realizes trajectory; [Undo] button is, as always, used to cancel all changes in trajectory since the moment of opening of the editor window.

Press «Circle/Curve» ⊚ button to make enclosed curve having 1-5 loops (1-5 factors). The curve view can be chosen in [Factor 5] window. [Apply] button

realizes the figure; [Undo] button is, as always, used to cancel all changes in trajectory since the moment of opening of the editor window.

You can use very convenient tool "Sewing machine" ⟨⟩ as well. It is very simple to «sew» a fixture's beam positions SCENE by SCENE, clicking on the field by mouse. SCENES are counting automatically in the limits of visible range, and when the range is over, the editor automatically exits «Sewing Machine» mode. During the «sewing» all other light fixtures are acting like when simple switching of SCENES. If you need to cancel the results of «sewing», you need to press

[Undo] button as usual.

If you open track editor during play back, results of corrections are visible right away.

Use magnifying buttons **to change track field size.**

21. Pan/Tilt update

This feature is very good for mobile show users.

Pan/Tilt Update can be described as some template keeper. These templates are to be used in live shows. To be more correct, the Pan/Tilt Update editor is keeping not only the very DMX information but the list of SCENES, which need to be updated as well. The most important is the fact, that Pan/Tilt Update editor enable not only 32 typical SCENES (templates) memorizing (beam positions only), but also making changes in this templates and updating all their clones by pressing one button. At the same time all changes concern only beam positions (the rest of the SCENES-clones DMX data can be absolutely different, it will be not changed anyhow). When you move with your show to new plac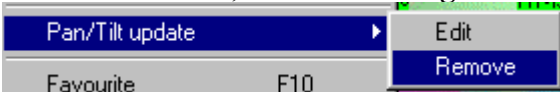e (with different venue and the trim height of the truss) and fixtures' beam positions in some important scenes have to be different, all you have to do is trim the position templates to the correct location. All the SCENES and SEQUENCES, registered in the Pan/Tilt Update editor, will be easily updated using the position templates.

«DMX Wizard 512» has 32 position memories (templates) into which you can store Pan/Tilt position for all the devices (the same way as it is stored in complete SCENE information). Unfortunately in the current software version there is no any possibility to choose some separate light fixtures for position updating. It means, all SCENES registered in the same Pan/Tilt Update template must have the same beam positions of ALL light fixtures. To understand how it works we can offer some example.

Let us have 10 scenes in our SHOW which have the same beam positions, and this positions are very important for us because the beams have to highlight people standing on the stage. When we settle from place to place, we have to adjust all this positions in all SCENES, but other components will stay the same (colors, gobos, and so on). To correct beams every time in every SCENE is good idea but not the best. It is much easier to assign all this 10 scenes to Pan/Tilt Update SCENE number 1. How we do it is:

a) Choose command from «Settings» menu. This has to be made only at first address to «Pan/Tilt Update» editor in the current SHOW, after erasing of all position templates (choosing command). After that, «Pan/Tilt Update» window will open, close it till it will be needed.
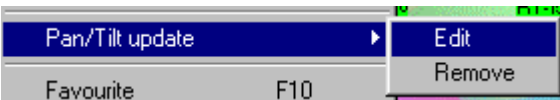
b) Switch one of the 10 SCENES. Right click on the SCENE name.

c) Choose command from the pop-up menu. Then you see

the next dialog window .

d) Set «1» in the template number window because we want all our 10 SCENES be clones of the template number 1 (in other words we want to register or assign them with template number 1

e) Carry out the same actions for all 10 SCENES.

f) Choose options from «Settings» menu. We can see «Pan/Tilt Update» window with light fixtures list and Pan/Tilt field.
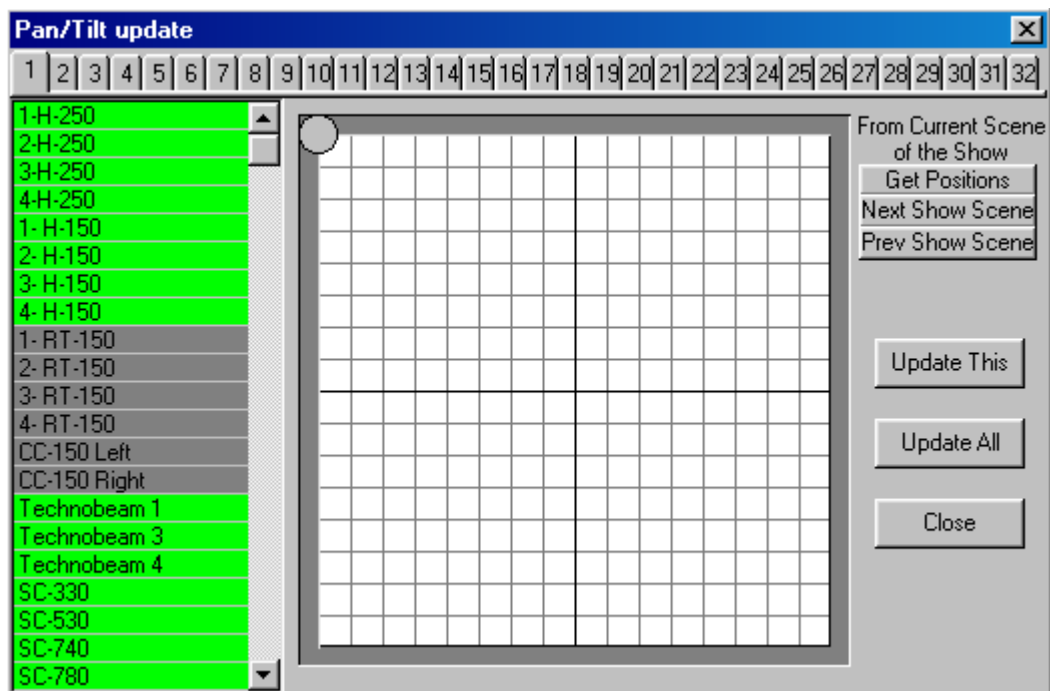
g) If SHOW is currently at one of our 10 SCENES we can import all beam positions from this SCENE into the template number 1. We choose tab «1» in «Pan/Tilt Update» window. We press `Get Positions` button.

h) Now we have all the beam positions in the template number 1 exactly the same as in the current SCENE, but we can make changes in the template choosing some light fixtures and correcting their beams. Though we see all corrections made on Pan/Tilt field of the «Pan/Tilt Update» editor, they won't touch the current SCENE parameters neither physically (real fixtures' beams will keep standing in one position) nor virtually (in the current SCENE's memory), till the moment of the next step. If we now close the «Pan/Tilt Update» editor, all changes made inside the editor's Pan/Tilt fields will be kept only in it.

e) We press `Update This` button to correct all 10 scenes at once. If it is necessary exit the «Pan/Tilt Update» editor, make VISIBLE editions of the current SCENE Pan/Tilts and pass again from the step «f».

To remove the current SCENE from Pan/Tilt Update registration (assignment), choose `Remove Position Reference` command from the pop-up menu with right click on the SCENE name.

To change the Pan/Tilt Update template number assigned with the current SCENE, choose `Change Position Reference` command from the same pop-up menu.

In more complicated shows there can be more «Scene - sisters» «families» for quick correcting (we can serve up to 32 «families»!). All «sisters-SCENES» of one «family» have to be assigned to one «Pan/Tilt Update» template (with the same number). If we have more than one «family», and we have got new positions for all of them, we can correct all scenes from all «families» at once by pressing `Update All` button. Please note, that it is not possible to correct only some light fixtures, while the other of light fixtures stay the same.

You can use `Next Show Scene` `Prev Show Scene` buttons, which has the same functions as buttons for toggling between SCENES within the current SEQUENCE, while you are in «Pan/Tilt Update» editor.

22. DMX channels setup

The window for setting DMX channels appears automatically at start of a new SHOW, or by pressing the button in the main window of the program. The same results can be achieved choosing option from the «Settings» menu.

In the middle of this window you can see the list of available light fixture control
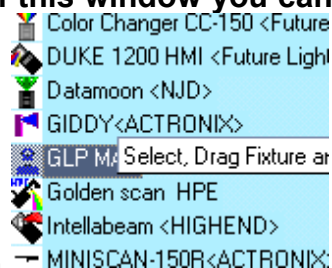

panels (templates).
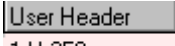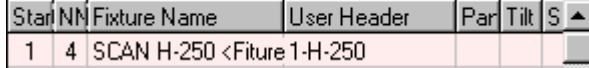
You can select and then drag & drop any device from this list into the «DMX channels field».

You can also move any light fixture mask into a new place of the «DMX channels field» by drag&drop operations.
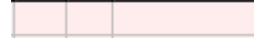
NOTE: if you use this method to change DMX address of fixture used in an EXISTING SHOW all SCENES and SEQUENCES will update so that corresponding DMX data of SHOW will move to the new DMX address.

If your light fixture is not listed in the light fixture list then you have to place the necessary *.dsp file to the Devices folder. You can take this file from the device library included in the package (see chapter E). Device library is always being extended in our web site http://www.futurelight.de. If you can not find the necessary fixture template, try to use Control Panel Designer (see chapter D)or you can order it separately free of charge (we are interested in expansion of supported devices library). You can contact us on of the next ways: e-mail: Gerhard Spiegel, gerhard.spiegel@steinigke.de or through web site. If you want us to make a good quality control panel for you, please supply us with all the necessary information about your light fixture (gobo pictures, DMX protocols and so on).
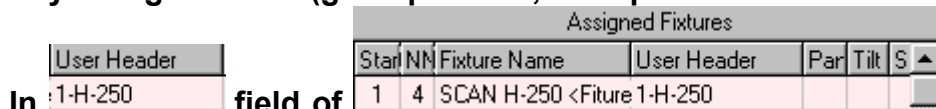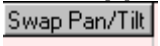
In field of zone it is possible to enter any user information, which will be displayed on the fixture's icon and on the fixture's headers in the tabs of the main window.
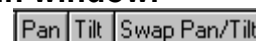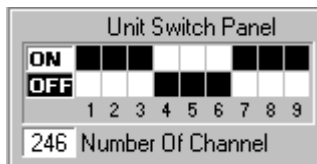
To the right of the user header you can see three check boxes . They are very important for humanization of the Pan/Tilt controls depending on the light fixture's orientation.

a) If your light fixture is oriented by its back side to the operator (light-jokey), you don't need to mark any of those check boxes because beam movement will agree with the mouse movement.

b) Now let us imagine that your fixture is oriented with its beam to the operator, i.e. any movement of the mouse will cause opposite (reversed) movements of

the beam. In this case you need to mark check boxes **Pan** and **Tilt** to coordinate the mouse and the beam movements.

c) **The fixture is oriented with its right side to you, i.e. the beam is shining from left to right. In a certain sense Pan and Tilt have «traded places». This event as well as such function has name «swapping». To coordinate beam with mouse you need to mark check box** **Swap Pan/Tilt** . **Now you will find out that Tilt movement is reversed to mouse. To compensate this you need to mark check box** **Tilt** **as well.**

d) **The fixture is oriented with left side to operator. «Swapping» is also necessary here, i.e. you need to mark check box** **Swap Pan/Tilt** . **Now you find out that Pan movement is reversed to mouse. To compensate this you need to mark** **Pan** **check box.**
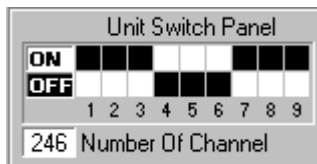
An image of the DIP switches **Unit Switch Panel 246 Number Of Channel** is shown to make easy to set DMX addresses of the light fixtures. The picture is corresponding to the switching to channel, under which the cursor is. The channel number is highlighted in the channel window **246 Number Of Channel** . Please, keep in mind, that some fixtures can have additional switches, which are not exposed on the picture. At the same time some other fixtures can have less switches (i.e. not all channels are available), and some can have alternative reference between switches and channels. For details see your fixture's user's guide.

Pressing the button **Close** saves a chosen configuration as the default configuration.

The button **Clear All** clears all occupied channels and clears all user headers.

The button **Panel Designer** recalls «Control Panel Designer» (see chapter D). Use it if you need to edit or design some of control panels. If you have designed a new one it will be immediately in the list of devices, if you saved it in the Devices folder. Close «Control Panel Designer» and you will see it (as you will appear in «DMX setup fixtures» window).

23. Hot Keys Assignment

To correct or assign Hot keys you have to choose [Hot Keys] option from the «Settings» menu. Then you will see the «Hot Keys Assignment» window.

Item	Hot Key
Show	
New SHOW	None
Load SHOW	Ctrl+L
Save SHOW	Ctrl+S
Save SHOW As...	None
Exit	Alt+F4
Sequences	
New	None
Load	None
Save	None
Delete	None
Rename	None
Split	None
Merge	None
Scenes	
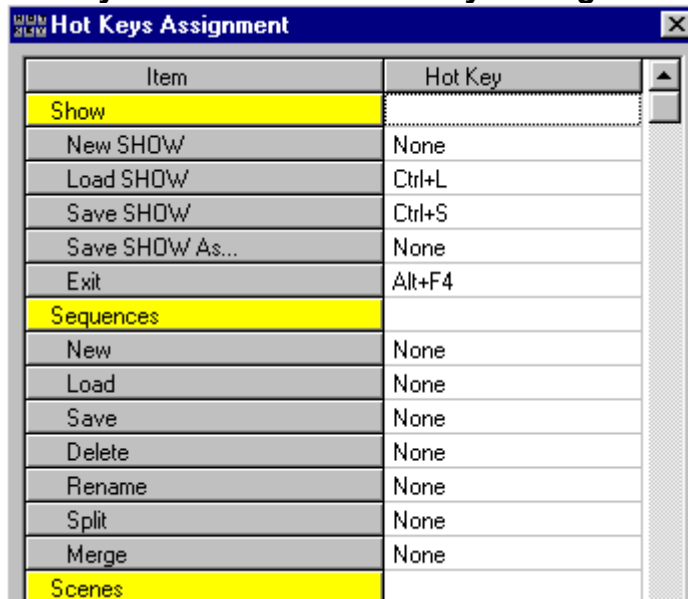
You can use any standard key combinations as a Hot keys, except for ones used by Windows. For example you can not use «Alt» + «Esc», «Alt» + «Tab», «Ctrl» + «Esc», «PrtScr», «Alt» + «PrtScr» or «Alt» + «Space».

To remove a Hot Key assignment press [X UnAssign] button, when the necessary Hot key is highlighted.

24. DMX signal parameters

The time parameters of a DMX signal meet the requirement of USITT "DMX512/1990".

TIMING DIAGRAMM
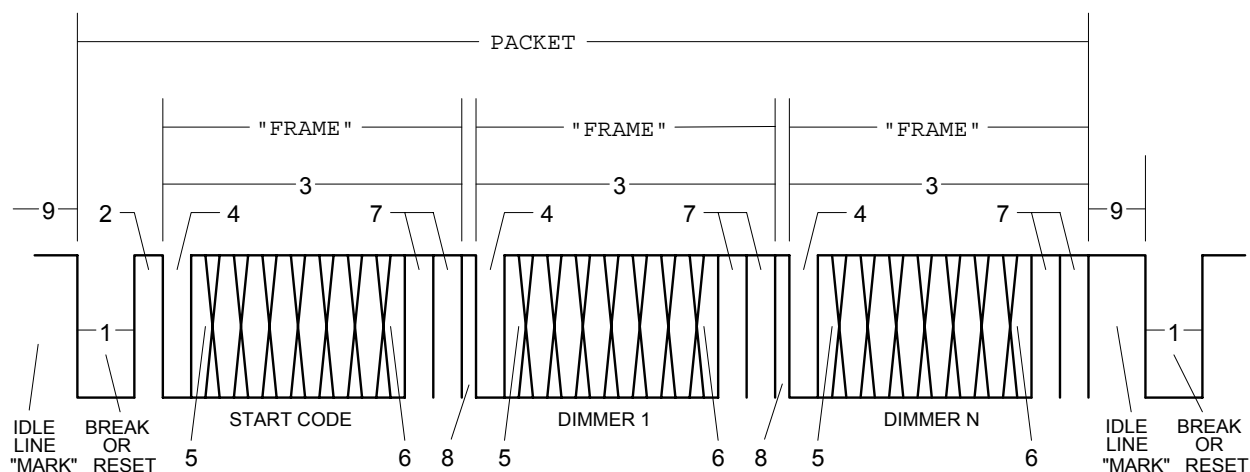
A Figure 1 for the DMX512/1990 timing diagram.

D ESIG	DESCRIPTION	MIN	TYP	MAX	UNIT
1	"SPACE" FOR BREAK	88	88	90	μSEC
2	"MARK" AFTER BREAK (MAB)	8.00	-	10	μSEC
3	FRAME TIME	43.12	44.0	44.48	μSEC
4	START BIT	3.92	4.0	4.08	μSEC
5	LEAST SIGNIFICANT DATA BIT	3.92	4.0	4.08	μSEC
6	MOST SIGNIFICANT DATA BIT	3.92	4.0	4.08	μSEC
7	STOP BIT	3.92	4.0	4.08	μSEC
8	"MARK" TIME BETWEEN FRAMES (MBF)	0	0	2	μSEC
	PACKET TIME	-	22.67	-	mSEC
	PACKET REPEATITION EVERY	49	50	51	mSEC

TABLE 1 for the DMX512/1990 timing diagram.
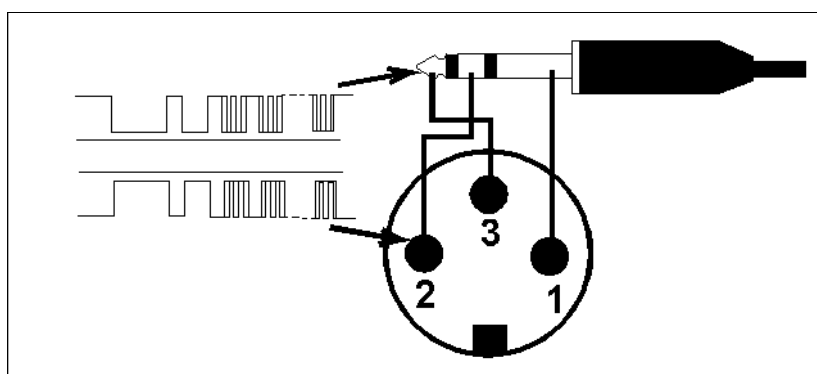
Contact correspondence between the stereo jack plug and XLR-3.

D. Control panel designer

(Light fixture Template Editor)

This software part is intended for constructing of light fixture control panels. These light fixture control panels (light fixture templates) are necessary for using them within «DMX Wizard 512» software for faster management of light fixtures.

If you are creating or playing show at the moment, to open the Control Panel Designer you have to close «DMX Wizard 512» application first. Then you have to start «DMX Wizard 512» again. On the start dialog press the "Fixture Template Editor" button. The more fast, though less evident way to open the editor is to open it through the «Setup DMX Fixtures» window, which can be opened from the main program window any of ways mentioned in chapter C22 «DMX channels settings». While you have this window opened you need to press Panel Designer button. In this case when editing or creating of panels is over, after closing of «Control Panel Editor», you will return back to «Setup DMX Fixtures», and your SHOW will keep loaded.
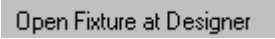
There is also two more ways to open the Panel Designer:

-with the help of button on the instrumental toolbar,

-via the right click on a fixture's icon on the plan in the main window, and further choosing of Open Fixture at Designer option from the pop-up fixture menu (in this case the Panel Designer will be opened right with the panel active at the moment).

The first you will see after loading is the next window:
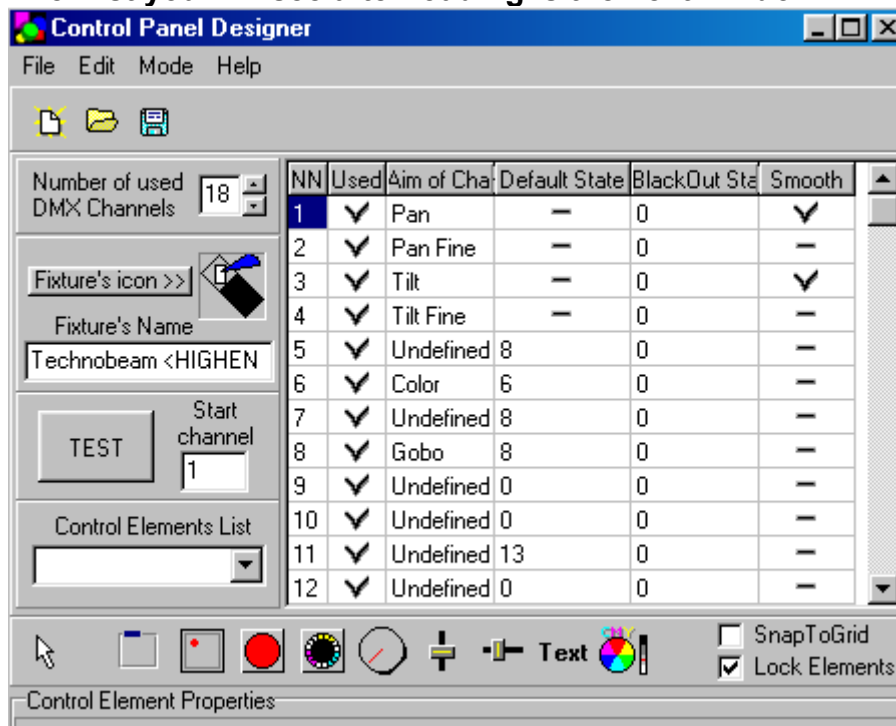
There is also an empty field for control elements to the right from this window.

There are two ways of constructing:

1.Load a previously created panel, change it to your needs and save with a new

name. We have to note here, that you can not find «save as..» command in the «Panels Designer», because the command «save» always means «save as..» here.

I.e. if you choose [Save] command from «File»menu or you press 💾 button, you will recall «Save as..» dialog anyway:
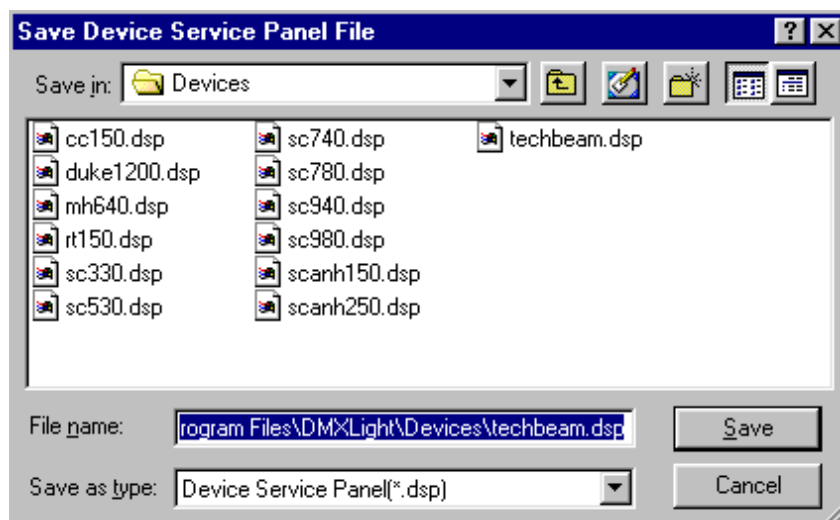
One of inconveniences when creating one panel from another is possible loss of an element when moving it from one place to another. We hope to fix this problem in future versions (an element falls under the container, and the only way to see it over is to delete it and create the new one).

2.Create new panel from zero. A possibility to open two «Panel Designers» at once seems to be convenient here. Of course, you can not move ready elements from one editor to another, but at least you can open some ready panel in one editor and, looking on it, to create something close in another. Don't forget about possibility to save button images to files and to load them into another buttons when making new panels.

Now let us to describe the very process of panel creating.

First you have to set number of DMX channels used by the light fixture in
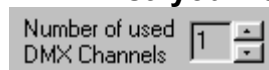
 window (correct by arrows).

Let us investigate the channel field .

The next step is setting the mask of your light fixture channels, particularly choosing active and non active channels of the fixture. For example: the light fixture named «DATAMOON» by NJD occupies 4 DMX channels, but channel number 2 is not used for the light fixture control, as well as «CC-150» color changer by Future Light - it occupies 4 DMX channels, but uses only one - «number 4». Please mark

check boxes for the channels used by the light fixture in the column and remove mark of unused channels.
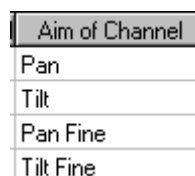
You can also **choose** the aim of channel **at the** window. If you have

Pan/Tilt control, it is **correct** to set the aim of corresponding channels to «Pan» and «Tilt». You are then allowed to use «Track editor» (**see chapter C20**) in the main program. If you have color control it is useful to set the aim of this channel to «Color», etc. This setting **also can be necessary for** «LOGICAL MASTER» mode.

Then we fill field. **When you create new SEQUENCES in a SHOW, channel values in the first SCENES of new SEQUENCES are as exposed in this field first.** Those values will be **also set on the channels** when pressing button **on the top left of control panel in** the main program.

Filling field **is very important for panels designing.** If you don't define «BlackOut» state of a light fixture **in this field,** all its channels will be set to 0 when pressing button **or** button **in the main program. But some light fixtures need careful treatment when you set them in «BlackOut» state. For example in some fixtures powerful lamps can be switched off, when you set all channels to 0. Then you need to wait up to 20 minutes to switch those lamps on. At the same time you can remove all lights without switching lamps off. For intelligent treatment you need to describe «BlackOut» value for each channel. To do this set values in «Black Out State» field,** choosing channels one by one.

Those values will be sent to the light fixture when pressing and buttons in the main program.

The next field, , **regulates the questions of fading or, in other words, the questions of soft conversion from one SCENE to another in some separate channels. Mark those channels which have to change between SCENES smoothly when** option **is chosen (see chapter C15 «Synchronization, MIDI and Hardware»).**

Then you have to load the previously created icon using button. **You need this to create recognizable image of the light fixture as you will see this icon in the** tab window in the main program. **You can draw this icon with any bitmap editing software, like «Paint» by Microsoft. Size for this icon must be 32*32 pixels and 16 or 256 colors bitmap or «ico» format. After pressing this button you will see** dialog. **Browse and choose necessary image. If you want background to be visible (not gray), mark bottom left pixel of image with any different color.**
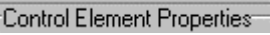
In the field **you enter the unique fixture's name that will be used later for identification of the light fixture by «DMX Wizard 512» software. You can view this name then in the** window, «Available fixtures list»

screen (<u>see chapter C22 «DMX channels settings»</u>). As a name you can use the fixture's brand name and it's manufacturer. .

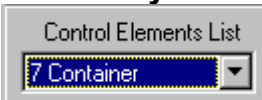The toolbar of possible control elements looks as follows:

You can select any element on this toolbar and click on the empty form of the constructed control panel to have the element on the panel. Each element has its own properties. Every element can be placed on the control panel, and then it can be tested with the help of [TEST] button or «Test» command from the menu «Mode». To highlight an element already placed on the panel you need [↖] tool be active.

If you have chosen one of the elements placed on the panel, you can toggle to any other element using keyboard arrows (left and right). To move element over the panel you can use all 4 arrows, while holding «Ctrl» key. To change an element's size, you can use all 4 arrows, while holding «Shift» key. Though, you can do the same right in [Control Element Properties] screen, correcting values in the correspondent windows. . By pressing «Ctrl» + «D» you can duplicate a selected element with all its properties.

Now we describe available elements:

1.Container [▣] - decorative element, it can be used to separate a group of control elements from other elements. It is very important to know that all other elements can be placed only on the container, which is activated at the moment, when you create any new element. If no any container is activated (just click on an empty field), it is the only way to put a new element on the field directly. At least, if

you don't see a new created element, just try to delete it (use [Control Elements List / 7 Container ▼]) and then create it again with some container activated. If you delete container (press DEL button when the container is activated, or use [Delete] command from the «Edit» menu), you delete all elements created during its activity. Elements placed in the container can be moved with their container selected, across the field using drag&drop operation. Don't forget that it is impossible to move elements from one container to another, from any container to field and from filed to container. Container has its header (caption), which is often used to make description for elements. Properties (reflected on [Control Element Properties] field): Left, Top, Width, Height, Caption - header of container, Color, Font.

2.Pan/Tilt Panel [▣] - active control element for Panorama/Tilt control of scans that have this function. Properties:
Left,
Top,
Width (fixed),
Height (fixed),
Pan Channel number,
Tilt Channel number,

Pan Fine Channel number (if [☑ Pan/Tilt 16 bit] option on [Control Element Properties] field is chosen),

Tilt Fine Channel number,
16 bit option, Half Size option.

Property ☐ Half Size is used to reduce this field size in two times. When you work with the half size Pan/Tilt, you can see that mouse resolution is twice more detailed, when the cursor is under the Pan/Tilt field. Please note, that resizing of the element's contour has no any effect, but there are some other possibilities. If you press TEST button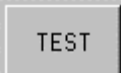 and right-click on the half-sized «Pan/Tilt panel», you will see that the size of this element becomes large. Some elements which were around the Pan/Tilt field are still visible, but some not. It should be useful to place no any container near of the half-sized Pan/Tilt field, because the container is always above all other elements. Click right mouse button once again and see that the size of panel becomes small. You can use this property if there is no space for positioning of another control elements.
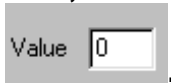
☑ Pan/Tilt 16 bit property allows using «Pan/Tilt panel» for controlling scans with «Coarse» and «Fine» channels for Pan and Tilt beam movement. When you use 16-bit Pan/Tilt field «Coarse» and «Fine» channels are used simultaneously for exact targeting. If you choose this option you can see a dotted line below the panel, it allows to set a «movement resolution» for mouse. It is possible to adjust «default movement resolution», which will be exposed in the main program. For saving a panel with selected «default movement resolution» you have to press TEST button, then to select necessary resolution and to save the panel. After assignment all of 4 channels you can try to move a target of this element and to see that speed of mouse movement changes with different settings of «movement resolution».

Pressing «Ctrl» key, while cursor is over the Pan/Tilt field in main window in the «DMX Wizard 512» software and in a «TEST» mode of the «Panel Designer», locks horizontal beam movement of a Pan/Tilt target, and pressing «Shift» key - locks vertical beam movement.

3.Color button 🔴 - active control element. It can be used to set a definite value on the selected DMX channel. Properties: Left 113 , Top 322 , Width 31 , Height 31 , Channel Number 1 , assigned value that has been set on the channel Value 0 , color of circle on the button. You can choose the color from the Windows color palette, using Change Color button. When you press it, you can see the next window
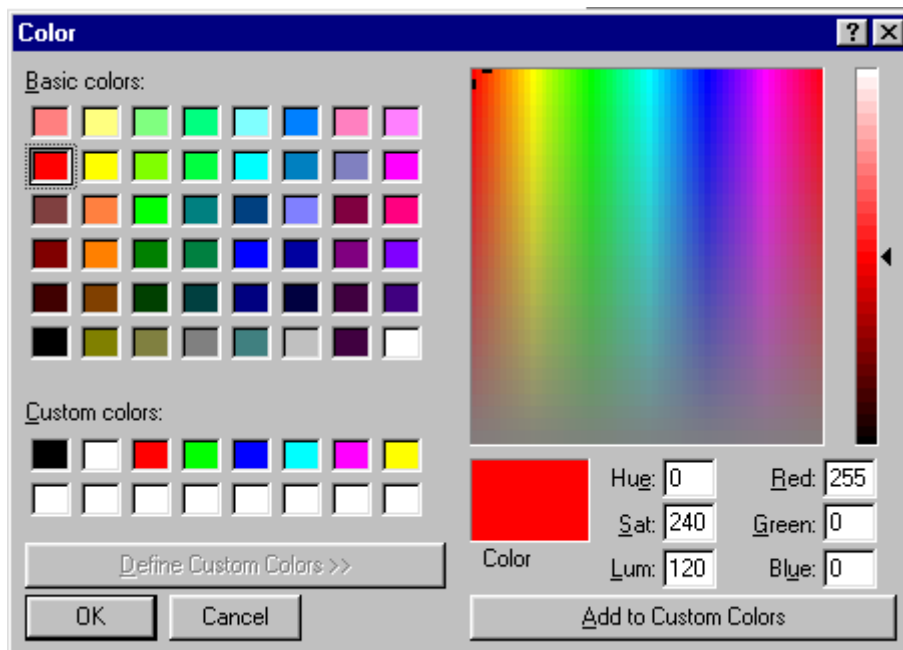
. It can look different if you use 256 colors or 16 color mode. You have to know that using high color palette for color knobs takes more resources from your PC when you load the control panel in the main program. We recommend using 256 color mode palette because panels made in it will go mostly in any case. In the end, when you have the

color chosen (it is indicated in window), you press «OK» to finish.

4.Image button - active control element. It can be used to set a definite value on the selected DMX channel. The image buttons are mostly useful for switching gobos, strobe effects and for any other events. Properties:

,

,

assigned value that has been set on the channel ,

image on the button. You can load image from file to the image button, using button. If you do this you will see the next dialog

. The file have to be in bitmap format, image size have to be not bigger than the button size (see width a height properties). To remove image from the button press . If you want the image background to be visible (not gray), mark bottom left pixel of image with any different color.

Caption on the button . If you have image loaded on the button,
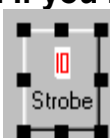
the caption will be placed below the image . To define caption font size and

color press button and make necessary adjusting.

5.Knob ⬭ - active control element to control variable parameter on the selected DMX channel within determined interval. Properties: Left `113`, Top `322`, Width `31`, Height `31`, Channel Number `1`, minimum Value Min `0` and maximum Value Max `255`, knob's color. You can choose the knob color from the Windows color palette, using button, doing it the same way as for color button (<u>see point 3</u>).
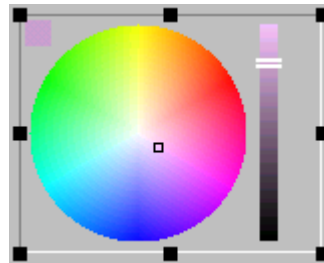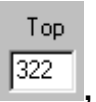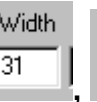
6.Vertical fader ⊤ - the same as Knob, but has different shape (<u>see the point above</u>).

7.Horizontal fader ⊦ - variation of the same item.

8. Color/Density Control element (CMY) 🎨
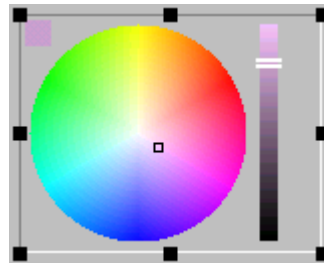
It looks the next way on the control panel: ◼. This element can be used in new advanced scanners and color changers which have 3 special channels Cyan channel, Magenta channel, Yellow channel. CMY element allows to control the beam's color and density continuously by mouse, not controlling every of the 3 channels separately. It is accessing the 3 channels simultaneously.
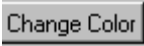
Properties: Left `113`, Top `322`, Width `31`, Height `31`, Cyan Channel `10`, Magenta Channel `11`, Yellow Channel `12`.

9.Text label - decorative element, it can be used for entering text comments on the panel.

Properties: Left `113`, Top `322`, Width `31`, Height `31`.

Text. Can be changed in Caption `Gobo wheel` window.

Label color. Can be changed the same way as for color button (use , <u>see point 3</u>). In the «Transparent» mode label color is not visible.

Font. Can be changed the same way as for image button (use , <u>see point 4</u>).

Transparence. Can be chosen in the Transparent `False` window (if «True» - color of label is disabled, if «False» - enabled).

Check box ☐ SnapToGrid allows you to match elements' position and size on the panel to the special grid 8*8 pixels. Matching is happening when you change

element's properties any of possible ways. Mark this check box, if you want to set all values divisible by 8.

Check box [☐ Lock Elements] locks the elements in their positions. It is equal «Lock elements» option from the «Edit» menu. If you have finished elements positioning and start channel values setting, this option can be very useful.

You can choose element clicking on it, using arrow keys or choosing it from the «Control Elements List» [Control Elements List / 2 Pan/Tilt Panel ▼]. It is very useful if you want to check, whether you've placed two elements at the same position or some elements out of the screen.

For testing light fixture with the new designed control panel or for testing some new designed element press [TEST] button. When pressed it turns into [DESIGN] button, which need to be pressed when tests are finished. Before that you need to set light fixture's DMX address. DMX address means number of the first fixture's channel, which you fill in the [Start channel / 1] window. You can start «Test» mode also via «Test mode» option from the «Mode» menu and return back to «Design» mode via «Design mode» option.

Setting of «Start channel» and pressing the [TEST] button allows checking your light fixture template in the real-time control mode. Turn on your light fixture and connect its DMX input to «DMX Wizard 512» control box and you will see the real job of elements on the designed control panel.

«Control Elements Properties» field

[Control Element Properties
Left: 30 Top: 12 Width: 24 Height: 24 Channel Number: 17 Value: 255 [Change Image] [X]
Caption: [   ] [Change Font]]
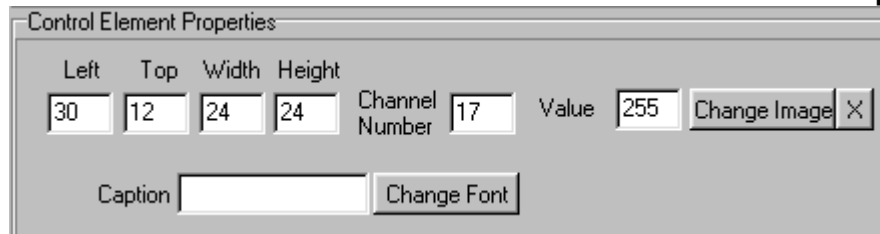
describes all properties of the chosen element. Properties are different for different elements (see «available elements» of the «Device service panel designer»).

On an empty panel body you can see description [!!! Reserved place for defined Control Panel Header !!!]. Please, don't recover this field with any elements, because, in the concrete installation, the name, which you will give to the fixture in [DMX channels setup] window (see chapter C22), is to be placed exactly instead of this description in the main program.

All control panel (*.dsp) files must be placed into the «Devices» folder to be available for using by the main «DMX Wizard 512» software. Light fixture templates, which are not required, can be removed from this folder. Removing of unnecessary files from the «Devices» folder will help your computer to keep additional power for other applications.

With minimum imagination you can design your own panels with two or more simple light fixtures controlled from one panel. For example you can control up to 32 Par lamp channels from one control panel (no need to have 32 light fixtures on a plan).

At the same time you can need to split one panel into two for controlling one device from two panels. It can be useful when you have big Pan/Tilt library (<u>see point C10.3 «Save Fixture SEQUENCE»</u>), and you want to use it for various brands of scanners.

E. The contents of the package, getting connected.

The package (hardware version 3.7U) consists of:
1. Controller box (3 XLR DMX outs, line-jack and mic sound activation)
2. LPT-port connection cable
3. Installation CD disk
4. User's manual
5. Package box

The package including remote control U18 consists of:

1. **Controller box (3 XLR DMX outs, line-jack and mic sound activation)**
2. **Remote control desk U18**
3. **LPT-port connection cable**
4. **Installation CD disk**
5. **User's manual**
6. **Package box**

ATTENTION!!! To avoid electronic damage make sure that all DMX-fixtures and the computer are unplugged (from power) when you make DMX-connections!

ATTENTION!!! The hardware controller of XLR-versions (hardware 3.1 and 3.7) should be supplied from an external power supply with voltage DC 9V (any polarity).

Information for U18 control board owners.

At the moment there are just a few things which you are able to do with U18. It allows mostly to change pre-loaded SEQUENCES on the way, while half of all SEQUENCES which can be controlled (the first 16 from 32 can be recalled without «Shift» button) work from external sound source, and half (the second 16 from 32 can be recalled while holding «Shift» button) work only from the pre-programmed Tempo Track. Tempo track have to be programmed before loading the SHOW into controller box memory. The first 32 SEQUENCES only can be controlled totally from U18, though the control box can hold much more.

Then U18 has «Tap» button which corrects the tempo, but when you stop tapping in couple of seconds the tempo is determined again by external sound source (in the first 16 SEQUENCES) or by Tempo Track (in the second 16 SEQUENCES).

Generally, the process of preparing SHOW and loading it into the flash memory for using with U18 is exactly the same as for Tempo Track SHOW (see description of process in C15.5). If you have made the process properly and then start the box (to start the box you have just to turn on its power), you can see that SHOW is going permanently from the very beginning to the very end of the last SEQUENCE and then again from the beginning to the end and so on while obeying the tempos/intervals written preliminary. But, if you plug U18 to the box (using the same LPT cable), the controller's job is changing immediately and goes, as described above, depending on the buttons of U18.

U18 precedence rule.

1. Turn off the power of the computer and turn off the power of all DMX-equipment.
2. Connect controller box (version 3.7U and higher) to the computer through the cable attached to the package. Connect the controller box to DMX-fixtures as well.
3. Turn on the power of all equipment including computer and controller box.
4. Prepare SHOW which consists of 32 SEQUENCES. Some SEQUENCES, if necessary, can hold only one SCENE for using them as «BlackOut» or «Favourits». SEQUENCES from 1 to 16 have to be prepared to work with external sound source (excluding those consisting of 1 SCENE). SEQUENCES from 17 to 32 have to be prepared with obligatory revision of their Tempo Tracks which can be corrected depending on your artistic styling.

5. Open «Synch» bookmark in «Synch and Hardware» dialog (see chapter C15). Revise «Bit Detector Enabled» option, which have to be unchecked before you start loading the SHOW into the controller box.

6. Open «Autonom» bookmark in «Synch and Hardware» dialog (see chapter C15). Make sure that you see inscription at that bookmark. Without this inscription there is no reason to start loading the SHOW because after such loading (without «Autonom Tempo Track Sequence» inscription) the controller box will not recognize U18 remote controller. Push button, you will see confirmation dialog . Push «Yes» button. The loading will starts and you will see proceeding indication dialog . Wait till the end of the operation.
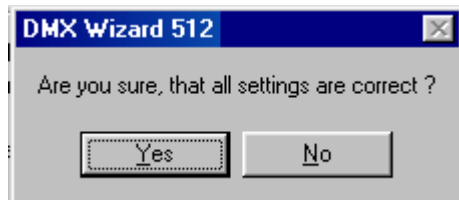
7. Turn off the power of the computer, controller box and all DMX-equipment.

8. Unplug LPT cable from the computer and connect it to the U18 remote controller.
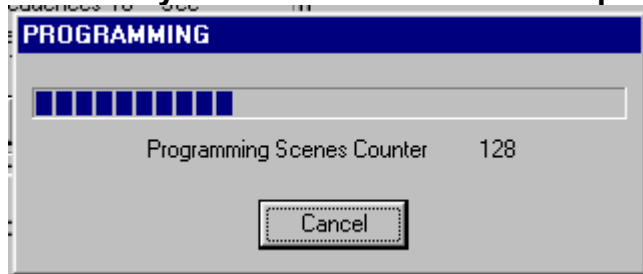
9. After the pause necessary for lamp's cooling (10-20 min), turn on the power of the controller box and all DMX-fixtures. You have to see on the U18, that button 1 LED is lighting. The button «Shift» LED is not lighting. It means that at the moment SEQUENCE 1 is chosen and it plays from the external sound source.

   Hint: if you want SCENES to be switched manually only with «Tap» button, not responding to the sound, plug phone jack (without cable) into the «AUDIO LINE IN» socket of the controller box.

10. To change SEQUENCES «on the fly» push corresponding buttons from 1 to 16. To change SEQUENCES from 17 to 32 use the same buttons while holding «Shift» button which LED lights up.

   If you need to make temporary correction of SCENE change rate push the «Tap» button in the tempo you need. The tempo restores to its original Tempo Track value or to external sound bit in 2 seconds after the last tapping.

Installation of the driver

If you are going to install «DMX Wizard 512» software on your computer for the first time, you have no need to read the further information! **For setting the printer port base address you can read the chapter C15 «Synchronization, MIDI and Hardware »**

F. Problems

Using multisequence player, two sequences are clashing.

SYMPTOM:

When two sequences are active in play mode, you see that the pan/tilt or colour or gobo effects are jamming, or you get restricted movement played back, through your lighting fixtures. For example with MAD SCANNER sequence playing and ROBOSCAN sequence also playing, both sets of lights seem to have lost the ability to PAN and TILT properly – like there is a clash or "jam".

REMEDY:

This is a short term fix – if you encounter this problem whilst engaged in your lightshow:
Turn off other active sequence using the ON/OFF button (which is a black or white light next to the sequence name selector)

However this does not fix the problem – it is just a quick way to save trouble if you are not able to stop show and go to edit mode!

THIS IS FULL FIX:
You must understand the concept of how a sequence stores data. Every sequence stores the settings of every light told to in scenes. See V\T editor info in your help files. Study how V\T editor works.

The problem of "Jamming" occurs when 2 or more sequences are trying to control the same lights at the same time. You might not have realised that you told the sequence editor to store this other light fixture scene data, but you probably did... as I have done... many times!

Looked at another way, Sequence 1 has info for primarily Light 1 but has managed to also picked up settings for light 2 which isn't needed. Sequence 2 has info for Light 2 primarily but also picked settings for light 1. The two sequences when played together clash or "Jam" against each other because both are trying to force commands at the same time. Ofcourse, there can only be one command sent to a light at any one time. The way the lights deal with two commands being sent at once is to either go with one command, or to not change light fixture settings at all.

Go out of Multisequence player back to Sequence Editor... the main screen.

Select V\T editor. Now select the SEQUENCE that has the jamming problem (do the other jamming sequence later, using this same method). Select the light fixtures that aren't the ones you want playing in this sequence . One by one, go through the channel info (click your mouse on) – ie: 1 = pan, 2 = tilt 3= gobo etc. If you see coloured channel info in the right hand data screen then you need to get rid of that data. That data is causing the jam. The easiest way to do this is to highlight the time bar – say scene 1,then scroll over to the last scene, then you see the scenes selected. With your mouse cursor over the selected area, press the right hand mouse button. Select CLEAR SELECTED, and you see the confirm clear screen. Press OK. This should now clear the scenes data for unwanted lights.

Note; Some people don't see the clear confirm screen, if they have turned this screen off previously, using the tick box!

Now you can go back and do the same for the other sequences that might have conflict scene data. When you have finished clearing all scene data for lights, exit the V\T editor using CLOSE. Save your project. Your show should work now with no jamming.

WHY DOES THIS HAPPEN IN THE FIRST PLACE:

This seems to happen because when you program a sequence you have selected another light, perhaps by mistake. This then causes the sequence editor to store scenes with data for that light. Be careful in future to only select light you are storing scenes for. Good luck.